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**OPTIONS FOR HEALTH INSURANCE: ADMINISTRA-  
TIVE SIMPLIFICATION IN HEALTH CARE**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON HEALTH  
OF THE  
COMMITTEE ON WAYS AND MEANS  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED SECOND CONGRESS  
SECOND SESSION

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APRIL 2, 1992

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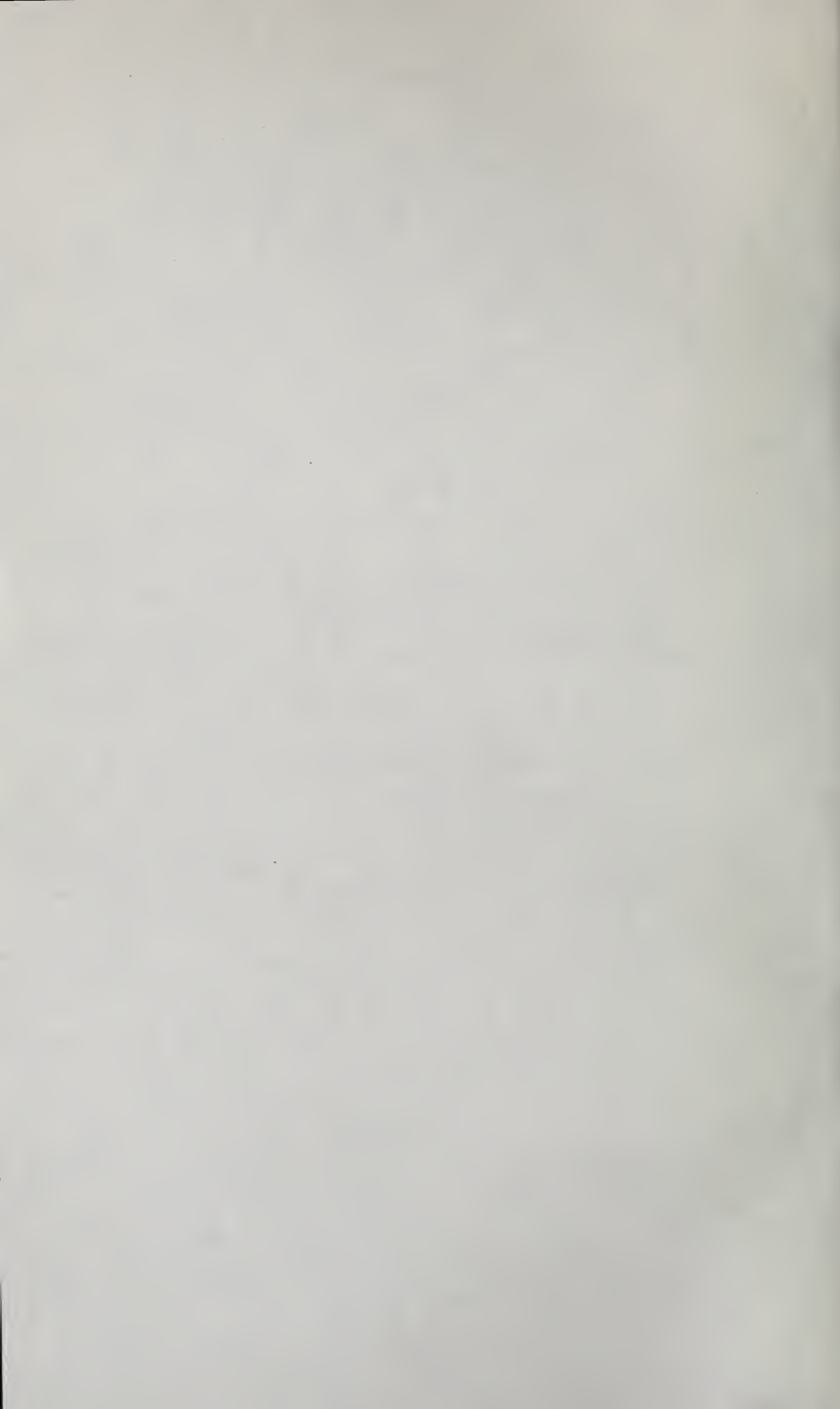
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# OPTIONS FOR HEALTH INSURANCE: ADMINISTRATIVE SIMPLIFICATION IN HEALTH CARE

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THURSDAY, APRIL 2, 1992

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON WAYS AND MEANS,  
SUBCOMMITTEE ON HEALTH,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 10:51 a.m., in room 1100, Longworth House Office Building, Hon. Fortney Pete Stark (chairman of the subcommittee) presiding.

[The press release announcing the hearing follows:]

(1)

FOR IMMEDIATE RELEASE  
TUESDAY, MARCH 17, 1992

PRESS RELEASE #25  
SUBCOMMITTEE ON HEALTH  
COMMITTEE ON WAYS AND MEANS  
U.S. HOUSE OF REPRESENTATIVES  
1102 LONGWORTH HOUSE OFFICE BLDG.  
WASHINGTON, D.C. 20515  
TELEPHONE: (202) 225-7785

THE HONORABLE PETE STARK (D., CALIF.), CHAIRMAN,  
SUBCOMMITTEE ON HEALTH,  
COMMITTEE ON WAYS AND MEANS, U.S. HOUSE OF REPRESENTATIVES,  
ANNOUNCES A HEARING ON OPTIONS FOR HEALTH INSURANCE:  
ADMINISTRATIVE SIMPLIFICATION IN HEALTH CARE

The Honorable Pete Stark (D., Calif.), Chairman, Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, announced today that the Subcommittee will hold a hearing on options for health insurance: administrative simplification in health care. The hearing will be held on Thursday, April 2, 1992, beginning at 10:30 a.m., in the main Committee hearing room, 1100 Longworth House Office Building.

In announcing the hearing Chairman Stark said: "Reducing administrative costs in health care through the use of electronic billing, uniform bills, 'smart cards' and other similar measures is one part of the larger question of health care reform on which consensus already exists. We need to move aggressively to put these measures in place, even if the larger issues are not resolved. I intend to introduce legislation prior to the hearing which will take advantage of the savings associated with administrative reforms."

Oral testimony will be heard from invited witnesses only. However, any individual or organization may submit a written statement for consideration by the Subcommittee and for inclusion in the printed record of the hearing.

#### BACKGROUND

A variety of reforms have been suggested to reduce the administrative costs of health insurance and the health care delivery system. Among the reforms proposed are:

1. The use of standard health insurance cards by all insurers and payers, which could be read electronically;
2. Requiring all providers of health care services to submit bills using a uniform bill format which would be accepted by all insurers and public payers for on-line, electronic billing;
3. On-line verification of eligibility and benefits through the use of direct computer access to either a single regional computer system, or through direct access to payer computer systems;
4. Processing of all bills through regional consortia;
5. Electronic transfer of funds between payers and providers; and
6. Development of standard audits and screens to be applied to bills by all insurers and public payers.

The methods and the technology for administrative simplification already exist and have been tested, for the most part.

(MORE)

For example, a uniform bill for hospital services, the "UB-82," has been in use for a decade, but it is not used in a uniform way due to various requirements imposed by insurers. Bills are submitted electronically to some payers, with Medicare leading the way due to requirements imposed by Congress in 1987. Currently, 77 percent of hospital bills and 44 percent of other bills are submitted to Medicare electronically. Less than 10 percent of bills submitted to commercial carriers are submitted electronically.

The use of regional consortia to process all bills is being tested in New York State under the New York State Single Payer Demonstration Project. Under the demonstration, 20 hospitals are submitting their bills electronically to a regional claims clearinghouse. The project is also developing uniform criteria for billing audits which will be used by all payers.

Also in New York and in Massachusetts, the Medicaid program uses an on-line system to verify eligibility. The program assures that providers will be able to know in advance whether an individual is eligible for Medicaid and route bills accordingly.

The technology for standard, electronic health insurance identification cards is similar to that used in the banking industry for automated teller machine (ATM) cards, but it has not been adopted by the health insurance industry.

The Secretary of Health and Human Services has announced an initiative in this area, and three task forces have been formed in response. The hearing will include testimony related to the work of these task forces.

#### DETAILS FOR SUBMISSION OF WRITTEN COMMENTS:

Those who wish to file a written statement for the printed record of the hearing must submit six (6) copies by the close of business on Friday, April 17, 1992, to Robert J. Leonard, Chief Counsel and Staff Director, Committee on Ways and Means, U.S. House of Representatives, 1102 Longworth House Office Building, Washington, D.C. 20515. An additional supply of statements may be furnished for distribution to the press and public if supplied to the Subcommittee office, 1114 Longworth House Office Building, before the hearing begins.

#### FORMATTING REQUIREMENTS:

Each statement presented for printing to the Committee by a witness, any written statement or exhibit submitted for the printed record or any written comments in response to a request for written comments must conform to the guidelines listed below. Any statement or exhibit not in compliance with these guidelines will not be printed, but will be maintained in the Committee files for review and use by the Committee.

1. All statements and any accompanying exhibits for printing must be typed in single space on legal-size paper and may not exceed a total of 10 pages.
2. Copies of whole documents submitted as exhibit material will not be accepted for printing. Instead, exhibit material should be referenced and quoted or paraphrased. All exhibit material not meeting these specifications will be maintained in the Committee files for review and use by the Committee.
3. Statements must contain the name and capacity in which the witness will appear or, for written comments, the name and capacity of the person submitting the statement, as well as any clients or persons, or any organization for whom the witness appears or for whom the statement is submitted.
4. A supplemental sheet must accompany each statement listing the name, full address, a telephone number where the witness or the designated representative may be reached and a topical outline or summary of the comments and recommendations in the full statement. This supplemental sheet will not be included in the printed record.

The above restrictions and limitations apply only to material being submitted for printing. Statements and exhibits or supplementary material submitted solely for distribution to the Members, the press and public during the course of a public hearing, may be submitted in other forms.



Chairman STARK. The Subcommittee on Health of the Committee on Ways and Means will begin its hearing, and the Chair would like to apologize to the witnesses and the members for being so tardy. It was unavoidable, and I am sorry.

Today we will continue our series of hearings on health insurance with a discussion of administrative simplification in the health care area. We will be discussing how we can save tens of billions of dollars currently spent on excessive paperwork, which we hope could be eliminated from the health system.

Administrative simplification is a particularly important part of reform. It reduces administrative costs, and the importance of reducing administrative costs and the unnecessary administrative burdens of health insurance is one place where some consensus exists.

If we reduce administrative costs through the use of electronic billing, uniform bills, smart cards, and other similar measures, we do not necessarily prejudice any particular method of health insurance or health reform.

We could support a Canadian system, or a play-or-pay, or a Medicare for all, or a voucher system, all of which could be accommodated by a well-designed administrative system.

We should move aggressively to get these measures in place. There is wide agreement on what could be done to reduce administrative expenses in the health care system. Much of what needs to be done is based on existing information processing technology. This is not an area in which we need to invent a new set of policies or processes in order to achieve our goals.

The issues which we need to explore in order to simplify the administration of the health care financing system include the use of a standard health insurance card format, available to all insurers and payers, and which could be read electronically, and a universal and unique numbering system for identification of beneficiaries.

I will be so bold as to say one already exists. We just use the Social Security number, and that would save us an awful lot of time having to find new numbers.

Second, the creation of electronic billing system, based on the standard bill formats and standard coding of diagnoses and procedures, which I believe now is almost completely in existence—there may be some variations, but we are pretty close to having that.

Electronic verification of eligibility and benefits could be simplified and could be a simple procedure with a common data base.

The use of claims clearinghouses, much the same as we use—while I hate to bring up the topic, the Federal Reserve System that most people use to clear checks.

Electronic funds transfer, which in better times has worked well, would be an inducement to providers to receive their payment earlier and more quickly.

Administrative simplification may also include the development of standards for audits and screens applied to bills by all insurers and public payers. I do not suggest that we establish those standard audits or screens, but merely provide a system at some point that an audit standard or a screen standard is developed. It could be used by the system. And again, I would like to make this a proposal that could be used by any system upon which we finally

agree. This may be an important part of a bill I will introduce shortly on this issue.

Standardization of the data required to support reviews and analysis would probably follow, if we have a standard coding system for procedures.

Much consensus exists—or consensus does exist on most of these issues. Moreover, the information processing technology is available in all of these areas.

Where there is some disagreement is in how far we should go in developing uniform approaches in each of these areas and what the role of Government is in ensuring that uniform approaches are used by all payers and providers.

Our experience suggests that a completely voluntary effort will not work. The history of the UB-82, the uniform bill for hospitals, makes clear that uniform approaches, not backed up by legal requirements, quickly disintegrate into idiosyncratic systems which place enormous burdens and costs on the system.

It may well be that we cannot achieve the administrative simplification we seek unless all claims for payments are handled by a single system. The bottom line is that the costs of health care continue to rise at unconscionable rates. Whether we favor broad change or something less sweeping, we all share the goal of reducing the overhead costs and hassle.

Administrative simplification demands our attention now. I know our witnesses today are prepared to offer good suggestions to the subcommittee on reducing those administrative costs and burdens, and I hope we can move quickly on their suggestions.

I plan to use their suggestions to introduce a broad administrative savings bill later in the month, and I look forward to hearing the recommendations of the witness, the first of whom is Mr. Jeff Sanders, who is the director of the Office of Legislation and Policy of the Health Care Financing Administration.

But before I call on Mr. Sanders to proceed, I note the second appearance of Mr. Gradison today. Do you have a statement?

Mr. GRADISON. No, Mr. Chairman.

Chairman STARK. Mr. Sanders, would you proceed?

**STATEMENT OF JEFF SANDERS, DIRECTOR, OFFICE OF LEGISLATION AND POLICY, HEALTH CARE FINANCING ADMINISTRATION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

Mr. SANDERS. Thank you, Mr. Chairman and members of the subcommittee.

I am pleased to be here to discuss the administration of the American health care system. We in the administration are pleased that the committee is having this hearing. We agree that administrative costs in our health care system need to be addressed.

Last November, Secretary Sullivan convened a forum of providers and insurers to consider the many issues surrounding the administration of the U.S. health care system. Flowing from that forum, the President's comprehensive health reform plan outlined five ways to reduce administrative costs and improve the value of our health care dollar.



We have a vision for the future of the Nation's health care information systems. In this system, nearly all eligibility verification, billing, claims adjudication, and payment will be conducted electronically, reducing hassle and costs and improving the value of our health care dollar.

Electronic cards carrying comprehensive insurance information will simplify billing procedures for patients and providers, slashing confusion and paperwork. Upon presentation of such a card to providers, patients will know what their insurance plans will cover and what their personal financial responsibility will be.

Likewise at the time and point of service, providers will be able to receive nearly instant information on the patient's eligibility, benefit limitations, and copayment requirements. Providers will not have to spend time sorting out which forms are needed for which payers.

Automating billing information is at least the relatively easy step toward a completely automated health care information system.

Automating clinical information, such as the medical record, is a more complex step, but a step that promises vast improvements in health care quality and value. Eventually automated clinical information will both reduce administrative costs and help prevent duplication of tests, unneeded care, adverse drug reactions, and other quality problems.

Once clinical information is automated, the subset of information needed for bill paying and eligibility can be stripped off at negligible cost, further streamlining the system.

The Nation and HHS are developing more knowledge about the relative effectiveness of alternative practice patterns, about outcomes, and about the interactions between different treatments. We can expect the demand from providers and payers for this information to grow. Electronic networks have tremendous potential to meet the growing demand for this information efficiently. Automated clinical information will be more complete, accurate, and available to providers at the point of service, when it is most valuable. Automation of patient records will speed access to critical information on a patient's history.

We also envision the use of expert systems to assist clinical decisionmaking. These systems can be built into computerized record systems and alert physicians to potential problems, such as an abnormal test result. The data culled from these computerized records can, with substantial research, feed back to the development of treatment protocols.

Patients will endure fewer ineffective or harmful procedures, and our health care system will be relieved of the cost of care that does little to enhance health.

Automating clinical information raises important issues regarding patient confidentiality that must be addressed. Electronic networks can be helpful in this regard by allowing those with the clinical information to determine who should have access to that information.

That is the vision. What are we doing now to make this vision a reality?

Activities fall into two categories, those related to our own Medicare and Medicaid Programs and those that we are encouraging and participating in the many parties in our private health system.

A few examples in our own programs include: Medicare electronic media claims. We receive about 91 percent of hospital claims and 48 percent of physician claims electronically, leading any insurer in the industry. We have set the goal of 100 percent electronic submission for hospitals and 75 percent for physicians within a couple of years. We are also requesting Congress to modify the way that we pay claims, so that we would pay electronic claims faster than paper claims, thereby encouraging providers to automate their systems.

Medicare electronic funds transfers and electronic remittance advice: We are piloting those features in four States.

Common working file access: HCFA allows participating hospitals—through queries from intermediaries—online access to Medicare eligibility files, reducing the hassle of eligibility verification.

Medicaid eligibility: You will hear later about what is going on in several of the States. But New York and Massachusetts have developed online access to Medicaid eligibility information.

Clinical information: With the uniform clinical data set, HCFA and the peer review organizations will be able to analyze patterns of patient care and outcomes, information which hospitals and physicians can use to improve their performance.

With regard to cooperation with the overall health care system, the Secretary's forum prompted a diverse set of private interests to work together at high levels to automate the health information system to improve it for patients, providers, and payers.

Since witnesses from these groups will appear later, I will leave a progress report to them. We are supporting and assisting in their efforts.

We think the key to making electronic information exchange efficient is basic standards for the transmission of data, including clinical information, financial information, and insurance information. Standards should be of mutual benefit to the parties involved. For that reason, we support and encourage the cooperative standards development efforts that are underway from the Secretary's work groups and existing groups, such as the American National Standards Institute and Health Level 7.

We are publicly committed to adopting the ANSI X-12 standards once developed. This was an important milestone for the private folks, because they were concerned that if HCFA did not adopt these standards, they would not be of much use.

To conclude, administrative cost savings are within our reach. We have already taken positive steps to eliminate administrative inefficiency and capture wasted dollars in our health care system. Much more needs to be done. Electronic information exchange promises substantial savings and improvements in the quality of care.

Thank you, and I will be happy to answer questions.

[The prepared statement follows:]



STATEMENT OF JEFF SANDERS, DIRECTOR, OFFICE OF  
LEGISLATION AND POLICY, HEALTH CARE FINANCING  
ADMINISTRATION, U.S. DEPARTMENT OF HEALTH AND  
HUMAN SERVICES

Mr. Chairman and Members of the Committee:

I am pleased to be here this morning to discuss the administrative costs associated with the American health care system. This issue is the focus of a Departmental initiative and is a prominent feature of the President's Comprehensive Health Reform Program.

ADMINISTRATIVE COSTS - BACKGROUND

In 1991, we estimate that the United States spent about \$43 billion on insurance administration -- \$32 billion for private insurers and \$11 billion in public programs. We estimate about \$34 billion represented claims processing, quality assurance, utilization review and general administrative costs, with marketing, profits and taxes accounting for the other \$10 billion in costs. An additional \$36 billion was spent on provider billing costs, with hospitals accounting for \$17 billion, physicians for \$10 billion, and other providers for \$9 billion. The nearly \$80 billion total represented 12.2 percent of personal health spending.

Many believe that administrative costs are, by definition, wasteful. This judgement ignores the important contributions of administrative activities that safeguard patients, providers, payors and insurers. Quality assurance and cost-saving utilization review improve health care and reduce unnecessary care. Other administrative activities support cost sharing provisions, medical research, and data systems to influence informed clinical and management decision making. To crystallize this perspective:

- o One need only look to recent laws that increase administrative costs but improve quality, such as clinical laboratory and mammography standards and the peer review program (PROs). Other Congressional actions have increased administrative spending in order to reduce overall health costs, including drug utilization review (savings through reduced drug interactions) and new physician referral reporting requirements;
- o Recent studies by Lewin/ICF<sup>1</sup> and OMB<sup>2</sup> both found that movement to a single payor, Canadian style system would reduce administrative costs but increase the overall costs of health care. Savings in administrative costs can be overwhelmed when important cost-saving features such as cost sharing are eliminated. The Lewin study estimated benefit costs would increase by \$78 billion per year, swamping the \$47 billion in annual administrative savings that could be achieved<sup>3</sup>. In addition, quality and future innovation would be compromised.

HHS considers administrative costs in terms of the value of our health care dollar and the changes which should be made to

<sup>1</sup> Sheils, John F., and Young, Gary J., National Health Spending Under a Single Payor System: the Canadian Approach, staff working paper, Lewin/ICF, November 1991.

<sup>2</sup> Darman, R., "Comprehensive Health Reform: Observations About the Problem and Alternative Approaches to Solution," Testimony before the Ways and Means Committee, U.S. House of Representatives, Washington D.C., October 10, 1991.

<sup>3</sup> While \$12 billion of the new costs estimated by Lewin represented an increase in utilization by those now uninsured and another \$10 billion represented added long-term care utilization, \$56 billion of the added health benefit costs represented increased utilization by those now currently insured.

increase this value. From this perspective, it is obvious that some significant fraction of health care administrative dollars does not enhance the value of our health care dollar and should be eliminated, reduced, or redirected.

#### THE PRESIDENT'S PLAN TO REDUCE ADMINISTRATIVE COSTS

The President's Comprehensive Health Reform Program includes a series of related initiatives to achieve a vastly improved and less costly health care information system. We believe two areas have great potential for administrative savings: paperwork costs associated with eligibility and billing; and insurance overhead in the small group market.

Electronic health care information exchange will:

- o reduce paperwork frustration for patients and providers;
- o reduce the red tape, hassles and administrative costs of eligibility verifications, claims processing and adjudication, utilization review and funds transfers;
- o provide hospitals, physicians and others with ready access to a wealth of clinical data; and
- o enhance information for clinical decision making.

Before describing the specific steps we are taking, I would like to outline this long-term vision for the administration of the U.S. health system.

Eventually, nearly all eligibility verification, billing, claims adjudication, and payment will be conducted electronically. Upon presentation of a health insurance card to a provider, a patient will know what their insurance plan covers and what their personal financial responsibility will be. Likewise, at the time and point of service, providers will know which payors will cover the cost of care. The confusion and paperwork associated with eligibility verification and claims payment will be eliminated, as will confusion surrounding coordination of benefits. The simple automation of claims submission will save billions, while the changes which follow will further reduce costs.

Complementing this effort, we support the move towards computerizing clinical information, such as data contained in the medical record. Electronic clinical information promises long-run administrative and benefit savings. We believe the volume of -- and need for -- useful clinical information will dramatically increase. Electronic networks have tremendous potential to meet this growing demand efficiently. Information will be more complete, accurate and available to providers at the point of service, when it is most valuable. More importantly, this change offers a tremendous opportunity to improve the quality of care.

The attached charts show how the ultimate system might work by linking providers and payors. The first chart illustrates how uniform standards in an electronic-based system simplify information sharing. Payors and providers can exchange information -- including medical records, test results, prescriptions, and eligibility verification -- quickly and accurately.

The second chart depicts how electronic information sharing will change the way doctors receive, use and transmit information during a typical office visit. When a patient enters the office, the physician will be able to obtain eligibility information from the patient's insurer. During the visit, the physician will be able to access extensive computerized data, including practice guidelines developed from enhanced clinical data sets. And after the visit, insurance claims and payments will be transmitted more quickly and accurately through an electronic network.

A non-electronic environment generates immense volumes of paper and confusion, especially as health care costs increase and

payors demand greater accountability. Our health care system is only beginning to realize the potential for tremendous efficiencies in this area.

We know standardized electronic information sharing can transform how an industry does business. Banking, for example, used to be paper-based, much like health care today. But standardized electronic data interchange has streamlined financial administration. Today banks handle most customer transactions either by phone or through an automatic teller machine, while institutional transactions are now exchanged instantaneously through electronic networks. Checks are cleared by automated clearing houses and credit approval is secured for millions of transactions a day with the swipe of a credit card. While acknowledging the complexities and differences of health care, we envision the health care system following a path similar to the automation of the banking industry.

We appreciate that privacy is a critical concern when medical records are computerized and made more accessible to potential users. Our goals for electronic information sharing include close attention to the confidentiality of this data. We are committed to developing a system which safeguards such sensitive information and protects individuals from the misuse or unauthorized disclosure of their medical history.

#### REALIZING THE VISION: NEXT STEPS

Electronic information sharing is already part of our daily lives, and is evolving in the health care field. In order to fulfill the vision of a streamlined, integrated health system, our challenge is to link our technological capabilities with our health care system's needs.

We have already begun this task within the Department through the Secretary's Forum on Administrative Costs. Last November, Secretary Sullivan convened government and health care industry leaders to discuss electronic initiatives and other alternatives to reduce the health system's paperwork costs. At that meeting, insurance and provider groups agreed to establish high-level workgroups to advance automation in the health care sector.

The President's Comprehensive Health Reform Program builds upon the Secretary's initiatives. These efforts fall into five categories.

#### Reducing Claims Processing and Billing Costs Through Standardization and Automation

Estimates suggest that providers and insurers together save up to \$2 per claim through electronic billing, with greater savings when claims are reviewed and paid electronically. Since over three billion claims are submitted on paper every year, substantial savings are possible just by increasing electronic submission rates.

Medicare is leading the way with electronic claims submission rates of 91 percent for hospitals and 48 percent for physicians. We have set Medicare goals of 100 percent electronic submission for hospitals and 75 percent for physicians and other providers within three years.

We have also proposed legislation to pay electronic claims two weeks faster than paper claims, a change that would increase electronic submission of Medicare claims to nearly 100 percent by 1995. In the President's 1993 Budget, we estimate that by increasing electronic claims submission from Medicare contractors, our claims processing costs will be \$700 million less through 1997 than what we would have spent processing paper claims.

We believe that uniform standards for data transmission is the



key step towards advancing electronic information sharing in the health care system. We are actively working with the private sector to develop technical standards to promote greater use of electronic billing. HCFA is committed to adopting such standards when developed.

Standardization of claims forms (or the formats used for electronic transmission) also reduces billing costs. In December 1990, our new HCFA-1500 claims form was finalized. This form for physician and outpatient services was developed by the Uniform Claim Form Task Force, which included representatives of every major third-party payer. Use of the HCFA-1500 is mandatory for Medicare; while other providers and payors will use the HCFA-1500 on a voluntary basis, we expect it will be widely accepted. Similar efforts have led to near-universal acceptance of the UB-82 as the standard form for inpatient hospital bills. While attachments to these forms often undermine some of the potential savings, efforts to standardize underlying data elements used in utilization review will help.

The combination of electronic claims submission and standardization of the data elements and formats required for claims will reduce provider cost and frustration. Providers submitting claims electronically will benefit from faster and clearer resolution of claims. Moreover, electronic systems can easily check for technical mistakes, such as forgetting to complete one line on a form, that often delay payment.

#### Developing Electronic Cards

In the future, electronic cards will be used by patients at the point of service to provide providers with comprehensive insurance information. This would eliminate the need for patients and providers to repeatedly fill out confusing forms. These cards also would streamline billing procedures for doctors and hospitals by providing immediate information on eligibility, benefits, copayments and deductibles.

Dollar savings will accrue directly to providers and insurers through more efficient administrative procedures. These savings will be passed on to consumers through lower premiums and out-of-pocket costs. Eventually, electronic cards could either include the card holder's medical records or be used to access the record. This would help prevent duplication of tests, adverse drug reactions, and other quality of care problems.

Before we implement the widespread use of electronic cards, we need to take the key step of developing standards for electronic data transmission. In addition, we must carefully consider privacy concerns. The health care sector recognizes that privacy is a potential problem in any system relying on card technology, and will be certain to address this issue as we move forward with this initiative.

#### Streamlining Medical Review

Improving medical review can reduce the "hassle factor" for physicians while reducing costs for unnecessary care. Our goal is to reduce our reliance on claim-by-claim review by monitoring and encouraging cost effective practice patterns. Claim-by-claim review is burdensome and costly. It also fails to fulfill the full potential of quality improvement in health care services.

Our Peer Review Organization (PRO) program is embarking on a new quality improvement initiative. Information from thousands of medical records will be abstracted into a computerized system known as the Uniform Clinical Data Set System (UCDSS). HCFA and the PROs will use the data to analyze patterns of patient care and outcomes, and to identify differences between hospitals. Hospitals, medical staffs and physicians will receive this information, which can be used to improve their performance. In

addition, a computerized "expert" system will be used to target potential quality and utilization problems with individual cases for physician review. This computerized system may serve as a model for use by private payers.

#### Developing Computerized Patient Record Systems

Automating clinical information through computerized patient medical records will improve the quality of care by improving the quality and legibility of medical documentation and facilitating rapid access to critical information in the medical record. In addition to efforts in the hospital setting, information can be captured from other care settings, such as the minimum data set collected on all nursing home residents. Computerized records are the first step to increasing the quantity and quality of information used to determine which treatment protocols lead to the best health outcomes. With substantial research, and the widespread use of computerized patient records and related information networks, providers will have access to state-of-the-art information.

"Expert" systems can be built-in as part of these computerized systems to alert physicians to potential problems, such as the need to follow-up on an abnormal test result. Computerized records will also strengthen quality assurance by providing hospitals and health plans with reliable statistical information regarding outcomes and complication rates. As an early indication of the potential quality improvements, two insurance companies now offer emergency room physicians a 20 percent reduction in malpractice insurance premiums if the risk management software is used in conjunction with computerized patient medical records.

Health costs could be reduced as well. Up to 20 percent of all medical care performed in the United States may be unnecessary or harmful. Computerized patient records will capture clinical data for effectiveness research. This research will help physicians identify the most effective therapies.

Early reports are encouraging. The General Accounting Office has reported that an automated medical record system reduced hospital costs by \$600 per patient in a Veterans Administration hospital. Other studies have demonstrated reduced lengths of stay associated with computerized patient records. If broadly implemented, computerized patient records could reduce unnecessary care by about 1 to 2 percent, saving \$20 billion a year by the end of the decade. More significant savings are likely in later years.

#### Reforming the Small Group Market

The President's plan will reduce administrative costs through small group market reform. We will encourage small businesses to purchase insurance on a group basis through Health Insurance Networks (HINs). The "retail" character of the small group market drives up insurance costs for small businesses. Insurers must spend more on marketing and administration for multiple small businesses than on a single large employer -- although the total number of insured employees may be the same. HINs will enable small employers to pool their employees for the purpose of purchasing insurance, thus providing small businesses with the same "wholesale" advantages large businesses enjoy. In addition to reducing marketing and administrative costs in the small group market, HINs will provide small employers with greater market influence to negotiate premium rates. The total impact of group purchasing can reduce insurance costs for small businesses as much as 16 percent.

#### BENEFITS OF AUTOMATING HEALTH CARE INFORMATION

To highlight the benefits of automating health care information:

Patient-friendly -- Automating eligibility verification, claims

payment and claims adjudication will eliminate the need for patients to fill out confusing forms. Eventually, it will offer patients immediate knowledge of the benefits to which they are entitled and their financial responsibility, if any, for care. Appointments and tests can be scheduled easily and immediately. Patients will no longer need to file claims with multiple insurers, each with their own forms and requirements. And patients can take medical records from provider to provider electronically.

**Reduced hassle for providers** -- Prior to treatment, providers will be able to receive nearly instant information on the patient's eligibility, benefit limitations, copayment requirements, and in many situations, authorization for procedures to be performed. HCFA now allows participating hospitals -- through queries from intermediaries -- on-line access to Medicare eligibility files, reducing the hassle associated with eligibility verifications. We are also considering a pilot project which would provide participating physicians with on-line access to the same information.

Following care, the automated health care payment system will screen claims for completeness and instantaneously submit them to appropriate third parties. The system further reduces hassles by facilitating rapid electronic transmission of remittance advice and funds transfer.

In addition, providers will not have to copy reams of forms nor fill out competing or duplicative forms. Necessary medical and insurance information will be readily available to their offices.

**Improved quality of care** -- Automated patient records will improve the coordination and quality of care. Medical records will be more readily accessible. Providers will be able to assess the patterns of care that are most effective in improving health status. Care-givers will have needed information at hand when and where they provide the care. For example, such a system will provide emergency room physicians immediate access to crucial medical history information needed to save lives. Similarly, adverse drug reactions and interactions will be more readily avoided by those writing and dispensing prescriptions.

The potential improvements in the quality of care include:

- o Swifter and easier care-giver access to data and, eventually, images;
- o "Expert systems" to help physicians with diagnosis and treatment;
- o Facilitating institutions' internal quality assurance as well as external quality assurance;
- o Additional detailed clinical data for use in outcomes and effectiveness research; and
- o Availability of increased information to the health care community.

**Savings through reduced administrative costs** -- Slashing the red tape associated with coverage determination and claims will save consumers, providers, and insurance companies billions.

- o For the 3 billion claims still submitted on paper, we estimate savings at \$.50 to \$1.00 per claim per provider and per payer when a claim is submitted electronically.
- o Providers experience significant savings when they receive remittance and payment electronically -- drastically reducing the volume of paperwork completed in doctor's offices and hospitals.
- o Patients will spend less time trying to understand and complete forms. Similarly, they will face less confusion and frustration having insurers pay their health care

bills.

Savings through reduced unnecessary care -- Research based on automated patient records will improve knowledge about the effectiveness of different patterns of care. Automation will provide care-givers access to such information at the time care is actually provided. This increased knowledge may reduce the amount of unnecessary care, which is estimated by some studies to be nearly 20 percent of all care now provided.

#### CONCLUSION

These reforms will interact with other elements of the President's Comprehensive Health Reform Plan. Our automation initiatives, for example, will enhance the cost-effectiveness and quality of coordinated care plans. In addition, these improvements in information sharing complement our initiatives to offer businesses and individual consumers better information so they can make more informed choices about health care plans and providers.

Administrative cost savings are within our reach. Through Departmental initiatives and the Secretary's Forum, we have already taken positive steps to eliminate administrative inefficiency and capture wasted dollars in our health care system. Electronic information exchange, through existing technologies, promises substantial savings and improvements in the quality of care.

Thank you. I will be happy to answer any questions.



Chairman STARK. Mr. Sanders, there is a program going on now to redesign the Medicare payment system for hospitals. As I understand it, there are eight new regions being created.

Are you familiar with that?

Mr. SANDERS. No, I am not.

Chairman STARK. OK. Well, evidently in California, they started one of these systems, and they did not run parallel, and they could not pay the hospital—HCFA could not pay the hospital bills or verify them.

And I was wondering why there had to be eight systems, each designed by a different contractor, each with a different data base and no requirement that they interface? To me, that seemed counterproductive.

Mr. SANDERS. Well, maybe there were some problems of minor inconsistencies. I just agree with you. It does not make sense. And I am not sure that that is exactly what is going on.

There may be some minor inconsistencies as we move toward a system. But we have a common working file system and are systematically moving to standardize the way we pay hospitals.

Chairman STARK. There are some task forces now working to come forth with some recommendations. Do you want to give me an idea of timeframes?

Mr. SANDERS. Yes. There will be people here who are heading those task forces, who will be better able to give you the specifics, but I think they are leaning towards having a set of recommendations available in the summer, by July of this year. They may stay together to develop standards or do something over a longer time-frame, but the first thing, as early as the summer.

Chairman STARK. Let me just outline a couple of ideas. I am further along, I think, in trying to frame an outline for some legislation.

My feeling is that there should be, for individuals, a unique number, and that the Social Security number fills that bill. It is a rare individual that does not have one or a taxpayer's number, and if they do not, it is pretty easy to get, and they are unique.

Is there a problem with that, that you all have come up with?

Mr. SANDERS. Well, I do not know that we have come up with, but using the Social Security number for things beyond Social Security seems to cause some controversy. And I guess from our perspective—

Chairman STARK. Let me state that I understand there are some political concerns. But as a technical concern—

Mr. SANDERS. As a technical concern, no concern. I would note, though, that there are other things that are probably quite comparable technically that could achieve the same purpose, maybe without some of the political concerns. And I guess if we agree on these goals—

Chairman STARK. But you are not old enough to know the problem of having to remember one number, much less two or three. [Laughter.] And I would submit to you that as we get older, we need those numbers more often. And I would beg you, do not saddle us with an extra number, OK? I mean, do you remember your service number, your Social Security number, your bank account number, your PIN number, and God help you punching the

wrong number into the wrong machine. It is apt to get you arrested.

Second, could we not design a system where the transmission of the data could accommodate any particular proposals that we now see on the horizon, whether it be a private insurance company—

Mr. SANDERS. Yes.

Chairman STARK [continuing]. Or Medicare or Medicaid or the State?

You mentioned the State of New York. If we designed this system, could the system not accommodate New York's system? It would be like a wire network or a transmission network that could accommodate various—if we had a format and a structure for the data base and a numbering system, we could all work together without prejudicing anybody's procedures.

Is that a fair assumption?

Mr. SANDERS. Yes, I think it is. I think there are even more ways to do it. And I do not think you even have to end up with a centralized data base. That may or may not be desirable.

But I would agree that there are a set of improvements that we could make in our administrative systems that would be improvements in any of the future health care systems that people are talking about.

Chairman STARK. I am under the assumption—and my model here is Visa and Mastercard and teller machines that will accommodate a variety of different systems—that it would be possible, and preferable, to have at least one entity—and in this case, it would be the Government—establish the design, and then make it with as few limiting factors as possible, and then let people go ahead and proceed to use the—call it an information utility, if you will, as we use the phone wires now?

You and I can hitch up computer systems across the country through the networks of AT&T, although we could go on to MCI or Sprint if we choose, but somebody must have a protocol which any of us can use, whether it is your office or mine or our homes.

Is that something that we have to establish to be a unique system?

Mr. SANDERS. I am not prepared to go that far today. I know how it has worked in the telephone industry. The alternative is the banking industry where the Government, with the exception of the Federal Reserve numbers on the bottom of the checks, never did set up standards, and they all—

Chairman STARK. That is the key. And, I mean, that is the only reason that the teller machines will work, is that there is—you can identify the bank, and you can identify the customer, and you can identify the branch, so that there is a routing system.

Beyond that—

Mr. SANDERS. But most of the standards in the banking industry developed voluntarily, and people collapsed in, and so there is a question—

Chairman STARK. But let me go back, because I was part of that.

When they started Visa—or Mastercharge actually—it was in reaction to the BankAmericard primarily, and the system was designed by a nonprofit umbrella organization to which every bank could belong if they chose. But it would be virtually impossible for

any bank or any other credit card system to design a different protocol, so that everybody's card was the same size, and the magnetic strip fit. Someone has to make that initial decision, I guess.

Mr. SANDERS. I think I agree with you. And the question is—and I think it is a valid question, it is something that is certainly worthy of some debate—is whether or not we should let the private sector try to develop standards that benefit them, so that they see it in their interest, or whether we impose something.

Now if——

Chairman STARK. How about if we hired the private sector to do it for us?

Mr. SANDERS. What?

Chairman STARK. I just said, we will plug the Government systems in, so at least there is a customer and somebody to start using it and see if it will work, and anybody else that wants to come in could join.

Mr. SANDERS. Right. But I also would say it is not the whole thing. The ANSI X-12 standards on the electronic transmission of data are very close to being developed, and most private payers are going to participate, and we in HCFA have committed to adopting those standards. That has kind of speeded the process up, because they were afraid that HCFA, as the gorilla, was not going to participate—that could be a model, too—no one was designated to do it, but you could not compete with other folks unless you met the general standard.

So I think it is an area that merits some thinking and some more thought. We would prefer to see how these standards, which are developing very, very quickly right now on a variety of fronts, do with the voluntary cooperation where everyone sees it is in their own interest to have these things.

Chairman STARK. I agree. But there has got to be a system you can voluntarily join. That is the problem we have with hospitals. I mean, we put it out, and nobody liked it, because it was a little bit different than what they were doing, and there was no requirement to participate.

And all I am suggesting is, if you create a system—and as you say, put the gorilla in, i.e. HCFA—then the inclination is that everybody would probably join.

And it seems to me that the system is so broad as to not prejudice anyone. Anybody can come into the system and follow any kind of procedures they want.

Is that a fair assessment?

Mr. SANDERS. Well, I am not sure we are disagreeing, but I am not sure we are completely agreeing. I am not sure that we have to require everyone to participate.

Chairman STARK. No, I do not either. But I would tell you, if they do choose to participate, they would have to follow our design standards. They would have to have the card the same size, and they would have to have data that would not disrupt—they could not stick viruses into our system—and they could choose or not.

Mr. SANDERS. Or the design system would be developed jointly among the various players, yes.

Chairman STARK. No problem.

Mr. Gradison.



Mr. GRADISON. Thank you, Mr. Chairman.

Mr. Sanders, what do you think would be the effect in terms of gaining maximum administrative savings of continuing the present system where under some plans the beneficiary makes the claim, and the other plans, the provider makes the claim to the insurance company?

Can we maintain that or those variations, or would that have to be standardized?

Mr. SANDERS. Well, I am not sure it has to be standardized, but the distinctions can almost go away. If we do have an automated system, what will happen is, when the beneficiary goes in to interact with the provider, the physicians' office or a clinical lab, they will have some sort of card. That card will go through a machine, and it will go out to the insurance company. The insurance company will almost immediately flash on the screen—while the person is standing right there—what they are covered for and what they are not, and the claim can get submitted through the system that way.

So I think that we envision providers submitting the claims, but with the beneficiary standing right there. With an automated system, you do not have to have an either/or. It is done at the point the service is actually rendered.

Mr. GRADISON. I am still not sure I understand you.

Mr. SANDERS. OK.

Mr. GRADISON. It is done at that point. But are you saying that the plan provides for the beneficiary to make the claim, that it would then go in at that point. It would be, in a sense, going in as a claim from the beneficiary?

By that, I mean, you make payment as a patient to the doctor, but while you are there, the claim goes in from you for reimbursement to you?

Frankly, I find this one of the most confusing parts of the whole current system, is that some—even under a given health plan, some providers do it one way; some do it another.

Mr. SANDERS. Yes. A clear reason exists right now why providers want to bill the beneficiary. And that is, the providers do not know if the people are really covered, or who is covering them or what the protocols are. And so, to be sure of payment, they say: Beneficiary, you pay me, and you go chase your system. And that is what is really frustrating to the American people.

If the card was available and the provider knew that they were going to get payment from the insurance company, the incentive to place this burden on the beneficiary would just go away. Right now, there is a reason why providers do this. And that reason would go away, I think, under an automated system, because they would know that they were going to get paid by Insurance Company X or Y at the point of service.

Chairman STARK. I just would suggest that if Mr. Gradison had a plan, for instance, that suggested the beneficiary should pay, there would be nothing in this system that I think you and I might envision that would not allow the insurance company to show and for it to go right to your Visa card, if you chose at that point, and the system could just branch off and hitch up to your Visa charge and pay the doctor electronically.

There would be nothing to preclude—or I hope it could be designed, so that it would accommodate any style.

Mr. GRADISON. Of course, thank you for the point.

Is it, Mr. Sanders, theoretically possible eventually that this card could also include medical histories of the patient?

Mr. SANDERS. Yes. It certainly—

Mr. GRADISON. I mean, one of the frustrations and wastes of time in the whole system is that every time—particularly in the fee-for-service system, every time you go in to see a doctor, you have to do the whole history again.

Mr. SANDERS. Right. It certainly is theoretically possible that the card itself or some variation on a card could hold medical information. That is actually one of the technologies that does not quite exist today, because there is such a vast amount of information, and images are very intensive.

But certainly if not the card holding the information, a way that the card would access the clinical information immediately, even if it is not on the card. I mean, if it is on the card, you have to worry about things getting lost and duplicates and people do lose cards, as we all know.

But it is certainly possible to access medical histories, so you do not have to go back, and you do not have to chase back your medical history. And that is possible. That technology is possible today.

Mr. GRADISON. Mr. Sanders, HCFA is involved in its fourth scope of work for the peer review organizations and plans apparently to use the Uniform Clinical Dataset as a means to evaluate patient care.

I would like your brief comments on three closely related questions in connection with this, which it might be easier for me to hand to you, since my voice is about gone. But let me read them anyway.

Since the use of the dataset requires the transfer of information from paper medical records to computer by hand, I am wondering what problems you anticipate with that part of the change?

Second, what policies does HCFA plan to implement to change the current PRO structure in order to meet the requirements of this data collection?

And finally, what plans does HCFA have to move, over time, from this paper to computer approach for the clinical dataset to a totally electronic environment for the transfer of this information?

Mr. SANDERS. We do not—there is a set of problems with paper medical records in terms of their quality and completeness as it is. We do not see converting these things into an automated format to be a bigger problem than already exists. So that is number one. In fact, we would assume over time that this would assure some consistency.

In terms of structure, we are planning for the actual abstraction of the paper medical record into the automated system for the abstraction part, not for the quality review. We are planning on moving to regional abstraction entities that could be PRO's or another entity, people who have more expertise and could do that more efficiently. So that is our structural change.

With regard to our plans to have this happen automatically, we would love to have that start happening right now. We are not im-



posing that on the hospital industry at all. So we are planning on abstracting these things ourselves at our own cost.

We are promoting, prompting the development of automated systems, because we think that it is in the hospital's self-interest to have better internal quality review systems. An automated system would then allow the hospital to dump information into our system automatically, save some money, and save a lot of frustration and hassle for us and for them. But that is going to take some time.

Chairman STARK. Mr. Coyne.

Mr. COYNE. Thank you, Mr. Chairman.

Mr. Sanders, how is it that Medicare's administrative costs are so much lower than other programs' costs, specifically, private programs?

Mr. SANDERS. Well, actually there are a lot of different numbers, and oddly enough, you can show some numbers that have Medicare higher than some of the private insurers.

Part of the reason is, Medicare has older people that tend to be very, very expensive. So when you take the total amount of money that Medicare is spending and divide it by administrative costs, that is a little bit unfair, because we have costly people.

I think Blue Cross has statistics available showing that when you measure it on a per capita basis, not a per dollar basis, Medicare is actually higher than Blue Cross' private business. And so there are a lot of funny numbers.

It is clear, though, that Medicare has a lot of volume, and that produces some efficiencies for us.

It is also clear—and I am sure some of the providers can tell you this—it is easy for us to say: Do it this way and do it that way. It is not so easy for a private insurer to do that. It is the so-called "hassle factor," where we demand a lot of information. So we push some administrative costs down on providers, and we are actually trying to ease that through a series of steps.

So what is absolutely true is that Medicare and large privately insured firms have tremendously lower costs than the administrative costs in the small-group insurance market, where the administrative overhead is up to 40 percent. We are talking about 3 to 10 percent in the large market, talking about 40 percent in the very small market. There is marketing; there are brokers' fees. Something we think needs to be addressed in the small-group market reform is those intensely high overhead costs for the very small employers.

Mr. COYNE. Do you think it would be feasible to apply Medicare's administrative processes to private insurance companies?

Mr. SANDERS. Feasible. Not necessarily desirable.

Mr. COYNE. How many employees does Medicare employ for the administrative work?

Mr. SANDERS. Well, HCFA employees 4,000 people. But we are the head of a big triangle, because we pay private contractors to process our claims. We think it is about—I am taking a guess; I will get you the right number for the record—25,000 or 30,000 people are employed by our contractors in administering the Medicare system. So they are not Government employees, but they are directly paid through contracts with us.

[The following was subsequently received:]

As of December 1991, Medicare contractors employed the following of FTEs:

Part A Intermediaries .....	7,676
Part B Carriers .....	20,855
Total .....	28,531

Mr. COYNE. If Medicare were the national program that was adopted, would a lot of those be able to be absorbed into the Medicare system?

Mr. SANDERS. Well, they are already in Medicare, so I think the question is whether the people who are not involved in the private sector would be absorbed into the Government program.

Mr. COYNE. Right.

Mr. SANDERS. They are already in the Government program.

Mr. GRADISON. That is right.

Mr. SANDERS. Presumably, I guess that is probably logically what would happen.

Mr. COYNE. Would there be a need for that expertise?

Mr. SANDERS. Sure.

Mr. COYNE. OK, thank you.

Chairman STARK. Mr. McGrath.

Mr. MCGRATH. Thank you, Mr. Chairman.

Welcome, Jeff. Let me suggest maybe a partial answer to the question that my colleague from Pittsburgh offered, is that perhaps the Government does not pay taxes; perhaps it does not pay benefits and fringes and a whole bunch of other things that private entrepreneurs may have to pay in order to pay the same kind of service that we do at this level.

Let me ask you, in regard to administrative costs, we have had estimates from the Harvard study, which estimates that \$100 billion could be saved in administrative costs, and I know HCFA has a lot of problems with that estimate.

There is a GAO study which suggests somewhere—that \$60 billion could be saved, should administrative costs be streamlined on the model of the Canadian plan.

And yet we see CBO testify before this subcommittee sometime back, Director Reischauer said the numbers are more like \$26 billion, and \$13 billion of it were in quality assurance proposals that we impose on the system.

What is more likely to be the correct number? And the reason I ask this is, of the proposals for a new health system out there presently, a lot of it—a lot of the costs shifting from this to patient care are explicit in how much we can save in this particular area.

Mr. SANDERS. Let me try it this way, and if this does not satisfy you, come back at me again.

But Lewin/ICF came up with, I think, a fairly sound study that showed that if we moved to a Canadian style system, we might save about \$48 billion—not quite as much as GAO and the Harvard study came up with, but still a good chunk. I mean, \$48 billion is a lot of money on the administrative side.

However, they found that there would be offsetting increases—higher utilization and induced demand and a set of other things that would go on for those people now currently insured. This estimate does not include the cost of insuring additional people.



But the fact of the matter is, administrative costs in our system are there for a variety of reasons. Some of them—and I think we are focusing on those today—appear to be wasteful and do not productively improve the value of our health care system.

But a lot of them are there to deal with quality and utilization. I mean, clearly if you are going to pay everyone's health care bill, there are going to be incentives to overconsume health care. These incentives already exist—we are already saying 20 percent of care provided is unnecessary.

And so if you eliminate the administrative costs which are going for utilization review, you are going to see utilization go up, and you are going to need to impose other forms of cost control, which may have costs of their own.

I am not sure if that—

Mr. McGRATH. And some of the proposals eliminate, to a large extent, the controls on utilization by not having things like copayments or deductibles or whatever. And I suspect those have to be factored in also.

Mr. SANDERS. And, in fact, even the GAO study—and I am not sure that the Harvard folks have commented on this—the GAO study said that the administrative savings that they estimated were tremendously dependent upon coinsurance and deductibles going away. In other words, the vast savings that they estimate assumes no coinsurance and deductibles.

So as soon as you impose coinsurance and deductibles, some of those savings start to disappear in the administrative system.

Mr. McGRATH. Thank you.

Chairman STARK. Mrs. Johnson.

Mrs. JOHNSON. Thank you.

I want to ask a question from a little different point of view. And I have appreciated your testimony. It has been very useful and interesting, particularly this recent discussion about the difference in administrative costs between the Canadian system and our system. I think the proportion of our costs associated with utilization and review is very high, and that whole issue has been unrecognized, and I thought you dealt with it very precisely and effectively. Thank you.

I am interested in what information you are simplifying. I had occasion to talk with one of my large companies recently—this was about a year ago—about their concern that they could not—it took them a year from the time they designed a product to the time they got it to the market. This happened to be an insurance company.

And in computerizing themselves in such a way that they could deliver that product within a couple of weeks to the market, they had to review all of the information that they were saving and look at, is this information necessary; is this information that we need to be focusing on?

And it was a systemic review of the value of what they had been doing over time that had to take place in the course of identifying what information now to computerize, save, store, and use.

Is that kind of review of data going on as part of this process of moving toward a simplified, uniform system? And what is the relationship between that data evaluation/data selection process and

the issue that my colleague from Ohio raised of the uniform clinical data set that in the future is going to be so critical to both the decision of appropriateness of care and actual eligibility of care for compensation?

So what kind of review of the data are you doing? Are you just simply integrating and looking at where forms are alike and where they are different and that kind of thing, or are you really thinking about what is the usefulness, what is the purpose, and what is the purpose in the next two decades as opposed to what has been the purpose in the last decade?

Mr. SANDERS. That is really getting to the heart of a lot of the issues that are involved here.

In terms of standardization, the easy thing is transmission. I do not think that anyone can argue that we should not have standardized transmission.

Then you start to get into the data that is necessary for utilization review and clinical decisionmaking. There is a series of efforts.

Obviously we made a judgment with our uniform clinical data set that these particular elements were useful for Medicare's purposes. We are not saying that that is the answer. It needs a lot of evolution. We are actively seeking input from others.

It is important, though, in terms of this tradeoff between flexibility and the costs of diversity, that we standardize some of the underlying data elements for utilization review and clinical decisionmaking. The uniform clinical data set is one effort. Some of the work groups are looking at some of these issues, and some of the standards development initiatives are also working on it.

You then get into a third area, which is at least part of what your company was doing, which is what do they do with the data, and what is valuable to them with the data once they have got it in.

And that is where we are less comfortable with standardization, since we are learning so much about what works and does not work. There is a lot of information developing now and a lot of people have different views about it. We are not prepared to impose or even encourage standardization of what people do with the data once they have got it.

I mean, different companies may want to look at utilization patterns or practice patterns a little bit differently. We would like to have the basic information a little bit more standardized, and we would like to develop, through work that our Agency for Health Care Policy Research and others are doing, a lot more information on what is effective and see how the market consumes that and uses it.

I am not sure of that. There was a lot to your question. I probably just scratched the surface. But that is my best try.

Mrs. JOHNSON. No, I appreciate—and I really asked the question to hear you sort of talk about it, because it is something that is difficult to understand.

But, in the billing area—I can understand what you are saying, in terms of the uniform clinical data set issue, and this sort of oversight outcomes issue, but in terms of what you are doing now to try to standardize, simplify billing issues, what kinds of issues are you having to struggle with?



Mr. SANDERS. OK. Standardized bills for physicians and hospitals have been developed. We think that those standardized bills, particularly on the hospital side, are in widespread use.

The problem is, when you move to utilization review, what additional information do the companies request? The bill is standard, but if they do not think that that is useful for them, then they slap a bunch of attachments on the back of it.

We think that additional standardization of underlying data elements needs to occur.

There is something called the Utilization Review Accreditation Committee that largely deals with process, but is also dealing a little with the data elements, and we support that effort.

We are looking into these issues, but it is something where we do not have agreement among experts, or are even close to agreement. And so we need more research, analysis, experimentation.

Mrs. JOHNSON. Thank you very much. Thank you, Mr. Chairman.

Chairman STARK. Jeff, just to follow up on that, if I may. All the complications that you anticipate, and I anticipate one in privacy of medical records, but it seems to me that is downstream. If the government used it initially, and you indicated there are a lot of—what are they called, CPT codes? There are a lot of codes out there that are pretty generally used, if not universally used.

It is not necessary to design a system that would prejudice adding different codes that were exclusively for their use. You would have to understand what they were at both ends of the line, but as long as it did not hurt the data that other people were using, different billing systems could coexist on a well-designed information system.

Is that a fair assessment?

Mr. SANDERS. Yes.

Chairman STARK. So that we could proceed to get the communications system working, with its standards, and leave for a later date the issue of what data, or people who have specialized needs would add to that.

If we wait until we have the whole thing done, our grandchildren may be sitting around debating what we ought to do.

The same thing with privacy. We may not have agreement on what ought to be done on privacy. One solution is to have it include very minimal data until you add data that people are concerned about.

So, as I say, it is one of those things that I hope we could all agree would lead itself to incremental installation, but it needs some sort of initial design and we build from there.

Mr. SANDERS. Absolutely.

Chairman STARK. And the initial design, in a very technical sense, could cause some problems later on unless we have some expert advice, which I think lies outside the Government, to design a very sophisticated data base and data transfer system that would be flexible enough to accommodate any users, or any potential users.

I hope we can work together. It seems to me the sooner we can arrive at some sort of a group that could begin, at least, to suggest an initial step, the sooner we can get going.

I hope we could do it so that we could accommodate a variety of interests of people who would use the system in different ways.

Mr. SANDERS. All right.

Chairman STARK. Then I think we could get some good work done.

Mr. SANDERS. I agree completely, and I think the first thing out of the box is an incremental step, the ANSI-X12 standards, which are the transmission data line standards. I think they plan on having those standards developed by the end of this year.

As I said, we in HCFA have designed our system so that we are flexible enough to use them once they are designed.

Then there are a set of other incremental steps. But I absolutely agree we should not be waiting for the ultimate system, because that is a ways away, and actually, we learn as we put incremental steps in, and help educate ourselves about the next steps.

Chairman STARK. Thank you very much. I appreciate your testimony. Many thanks.

Our next witnesses are a panel consisting of Spencer Johnson, the president of the Michigan Hospital Association, representing the American Hospital Association; and Dr. Dan Beauchamp, who is representing the New York State Single Payer Demonstration Program.

Mr. Johnson, we have you down as the lead-off witness. Would you like to proceed? Without objection, your prepared testimony will appear in the record in its entirety, and you might like to expand upon that or summarize it for the committee in any manner you choose.

Please proceed.

#### STATEMENT OF SPENCER C. JOHNSON, PRESIDENT, MICHIGAN HOSPITAL ASSOCIATION, ON BEHALF OF THE AMERICAN HOSPITAL ASSOCIATION

Mr. JOHNSON. Thank you, Mr. Chairman. I will summarize for the committee from that testimony.

Again, my name is Spencer Johnson. I am president of the Michigan Hospital Association, but I am here this morning on behalf of the American Hospital Association, and I am pleased to present testimony on the issue of reducing the administrative costs of delivering health care.

The current system is clearly in need of reform. Anyone trying to operate within the American health care system risks being buried under a mountain of paper—whether it is an individual, or a hospital, complying with insurers' requirements for filing bills.

What is ironic is that most of our administrative cost burden has arisen out of good intentions—that is, deliberate policies on the part of payers to reduce health care expenditures, or otherwise ensure that they are paying only for appropriate and necessary care.

What are some of the problems that we think need to be addressed?

Well, first of all, there is a lack of a universal requirement for the use of the uniform bill that we have been talking about. And even when the uniform bill is being used, insurers often require at-



tachment of additional forms, or even the complete detailed bill which, of course, defeats the basic purpose of the uniform bill.

A lack of standardization among payers in defining the data elements and codes used for billing is also a problem. For example, payers need a physician identified code, something that seems relatively simple. And yet, some want the Medicare provider number, others want a Medicaid provider number, others the Social Security number, and even others a State licensure number, and so on.

There is no central location where hospitals can verify insurance enrollment and coverage information for all patients. And, finally, there is a proliferation of utilization review agencies and criteria that we must contend with.

Let me give you some examples of the above.

In Michigan, Blue Cross/Blue Shield is in the process of rewriting its nine manuals for hospitals to make them simpler and easier to use. When they finish, hospitals will only have to look through and understand seven manuals to comply with Blue Cross/Blue Shield administrative requirements.

Also in Michigan, only Medicare and the Blues accept the UB-82 uniform bill. While the previous witness left us with the impression that use of the UB-82 uniform bill is rather widespread, in fact that is not always the case.

While worker's compensation carriers in Michigan are required to accept UB-82 forms, what they do is actually insist on the detailed bills, and often say, "Well, why don't you send the whole medical record along as well?"

Other insurers, including our own Medicaid program, will not accept the UB-82 form at all.

As the example of the UB-82 demonstrates, improvement is not simply a matter of computerization, of electronic claims submission, and of electronic patient records. What is also needed is standardization of the entire claims process. We need to seek agreement among insurers and providers on a minimum set of information and data that will allow for a streamlined and efficient claims processing by both.

Mr. Chairman, I agree—why is it that we can use an ATM card to deposit and withdraw money from our bank accounts anywhere across the country, but we cannot get all the payers to agree on a uniform way to determine eligibility, and to account for medical services?

If we all agree there is a problem, how can we fix it? What reforms do we see as necessary?

Well, first, the universal adoption and use by insurers of a uniform bill. Agreement by payers on a minimum uniform data set, as well as uniform formats, documentation and coding. However, this data set cannot simply be the sum of all the aggregate information required by every payer. That is no improvement.

Standardization of claims processing that will encourage 100 percent electronic claims submission is important. We need to attack the proliferation of utilization review agencies and review requirements, and also seek center enrollment and coverage determination information through the use of smart cards or similar mechanisms.

The AHA has been active in this area for some time, and we share the subcommittee's desire to find ways to simplify health care billing, claims processing, and payment systems.

We would caution, however, that not all administrative costs are wasteful. Moreover, a single-payer system, like that in Canada, is not necessarily a panacea for our administrative cost problems. As it was stated earlier, many of the administrative cost savings attributed to the Canadian system stem from the absence of patient cost-sharing and the attendant billing.

Also, the Canadian provinces generally do not engage in the collection of extensive, detailed clinical data for outcomes, research, quality assurance, and utilization review.

The AHA looks forward to working with this subcommittee to achieve administrative cost savings, seen as practicable, as well as health care reforms that address the issue of affordable health care.

I might also add that the AHA president, Mr. Richard Davidson, appeared before the full committee on March 4, and presented a general proposal for health care reform, community care network. We also feel that regionalization of health care would also go a long way toward standardizing some of the administrative activities and activities at the patient care level.

That, Mr. Chairman, completes the summary of my remarks, and I would be pleased to respond to any questions.

[The prepared statement follows:]

Statement  
of the  
American Hospital Association

Mr. Chairman, I am Spencer Johnson, president of the Michigan Hospital Association (MHA). On behalf of the American Hospital Association's (AHA's) nearly 5400 member hospitals, which include most Michigan hospitals, I am pleased to testify on options for simplifying health benefit administration.

What are administrative costs? Everybody has a favorite example of what has come to be known as the "hassle factor," from the gentleman whose mother greets him each Christmas with a shoebox full of medical bills and insurance forms that she needs his assistance to sort out and file, to the new mother caught between her insurance company and that of her husband, each contending that the other is primary payer on her new baby's hospital bill.

Administrative costs are not just a function of inefficiency in the operation of a rational health care delivery system. The system itself is not entirely rational. In fact, most administrative costs arise out of deliberate policies on the part of payers to reduce health care expenditures or otherwise ensure that they are paying only for appropriate and necessary care. For example, responding to a series of questions posed by HCFA on what it would take to implement the outpatient bundling rule, a number of hospitals advised AHA that they would have to hire new employees to negotiate arrangements with outside suppliers of certain services, track and bill for such referred outpatient services, and modify billing and claims submission procedures and systems. Similarly, in order to comply with Medicare's 72-hour DRG payment window, hospitals that were previously able to bill monthly for a course of physical therapy by listing the first and last dates of the month and the number of visits provided, must now list each of the individual dates on which a visit occurred so that the Medicare program can verify that none of these visits occurred within 72 hours prior to a hospital admission.

We share the subcommittee's desire to find ways to simplify health care billing, claims processing, and payment systems. We believe this is a good way to contain health care costs. Hospitals have supported and worked to implement these kinds of reforms for years. Today there's a growing consensus among providers, payers, and policymakers that we can make significant steps to improve our health care administration.

But we must move quickly and we must take into account the administrative costs of both providers and payers so that the result is an effective as well as efficient administrative system. Simplifying current systems is not enough. We need to eliminate unnecessary administrative costs. In effect, we must overhaul the way we deliver and pay for health care. I come to you today with a health reform proposal that will achieve the key goals of universal access and cost containment, and eliminate unnecessary and wasteful administrative costs.

#### REFORMS TO REDUCE THE ADMINISTRATIVE COSTS OF HEALTH INSURANCE

Hospitals have tried for more than two decades to reduce the administrative costs of health care coverage. One major focus of our efforts since the late 1960's has been the development and maintenance of a uniform hospital bill for all payers. In 1975, we helped form the National Uniform Billing Committee (NUBC). The committee includes major payers and providers and has successfully developed and maintained a uniform hospital bill (UB-82).

In developing the uniform bill, the Committee had to balance the payer's need for certain information against the hospital's burden of providing that information. Clearly, we think the committee achieved this balance with the UB-82. Most payers



accept the UB-82, and two of the largest payers, Medicare and Blue Cross Plans, usually accept the uniform bill without additional attachments or itemization. Unfortunately, other payers, most often commercial insurers, require additional information and attachments. This defeats the purpose of the uniform bill and places enormous administrative burdens and costs on providers whose payers depart from the uniform bill.

Currently, even when payers ask for the same data elements, they could be asking for very different information. For example, to identify a physician, some payers want the Medicare provider number, others the Medicaid provider number, others the HCFA Uniform Physician Identifier Number (UPIN), and still others the physician's state licensure number or the physician's social security number. Payer requirements for the collection of other data elements can be equally diverse and confusing, such as different requirements for procedure and diagnosis coding and different methods for reporting enrollment information.

The NUBC has recently revised the uniform bill into the "UB-92," which will be used beginning October 1, 1993. Among other modifications, the new form adds codes to eliminate the need for attachments, provides additional space for diagnosis and procedure codes to allow for better definition of services, and adds admitting diagnosis and external cause of injury codes for better analyses of billing data. As with the UB-82, the Committee, working with State Uniform Billing Committees (the state equivalents to the NUBC), will maintain this form so that all the data elements are clearly defined and understood.

In addition to streamlining claims processing, administrative costs also could be reduced by standardizing the utilization review process. This could be achieved by establishing more uniform and efficient procedures for private review. Much of this external review is done on a case-by-case basis, with excessive and diverse data and documentation demands placed on hospitals. Moreover, these firms, as a rule, do not share with hospitals, the criteria used for selecting claims for review or for denying claims.

Reducing some of the variation in review procedures will reduce the staff time hospitals now devote to the hundreds of private review firms, each with its own standards, criteria, and protocols. Better targeting of review on providers with known problems will result in more cost-effective review for both providers and reviewers. Finally, the need for external review could be greatly reduced if insurers would clarify their standards of appropriateness and make them available to hospitals so utilization can be managed internally.

Standardization is also critical in the management of administrative and electronic processes. There are over 400 different proprietary electronic systems. Without some standardization, competition among these firms could further fragment administrative processes, and result in higher administrative costs. An electronic standard--that is, the defined set of data elements to be transmitted electronically--as well as the electronic format must be carefully defined to avoid this unnecessary administrative fragmentation and cost. This also will prevent any single proprietary interest from controlling or dictating electronic transmission processes. The American National Standards Institute (ANSI) has already made some significant progress in establishing a common electronic format. The NUBC and the 1500 Committee (which manages the current uniform claim form for professional services) already maintain the paper standards of the uniform institutional and professional bills and, thus, should also assume the role of maintaining the electronic standards.

In summary, real cost savings can only be achieved if payers

demand less data from hospitals. Administrative data sets and the management of these data sets must be streamlined and standardized. In the case of claims processing, standardization of eligibility, billing and payment information is needed to effectively contain administrative costs. Second, and most important, payers must agree to accept uniformity in the elements and management of the data sets for claims processing.

Some of the reforms that will be needed to reduce administrative costs are:

- o Full adoption and use by payers (including self-insured groups) of uniform data sets and reporting requirements for claims processing, including billing, eligibility determinations, and remittance advices. These data sets and reporting requirements should be agreed to by both payers and providers and should incorporate uniform definitions, formats, documentation, and coding for claims purposes. The data sets should not be defined by the sum of the information requested by each payer; for example, the uniform bill must not be designed to include every possible way to identify a physician, allowing each payer to then select the method it prefers from the completed bill.
- o Standardization of claims processing software that will encourage 100 percent electronic claims submission and processing. (Proprietary interests should not be allowed to control or dictate electronic transmission processes in ways that would curb innovation or unnecessarily increase costs for providers or payers.)
- o Centralized enrollment and coverage determination (e.g., through the use of beneficiary or enrollee "smart" cards or similar methods that permit electronic verification of eligibility and benefit information.)

We're pleased that the Administration and the payer community have recognized these problems as well, and that we could work together at a forum on health care administrative costs organized by the Secretary of Health and Human Services last fall. As a result of the forum, three work groups staffed by health care providers and payers were formed:

- o One work group will examine administrative functions and costs to identify ways to reduce health care administrative costs. (This effort will help identify those areas most ripe for change and those administrative functions worth preserving.)
- o A task force on patient information chaired by AHA president Dick Davidson will oversee two work groups--a work group on external performance monitoring and a work group on computerizing patient records. The first work group will examine ways to reduce the expense of costly case-by-case review of individual claims that characterizes contemporary external review. The second work group will develop a strategic plan for the computerization of patient records. They will follow the recommendations emerging from last year's report from the Institute of Medicine on the development of computer-based patient records. Although perhaps costly in the short term, many believe that computer-based records can put more information in the hands of care givers and medical decision makers while facilitating the retrieval of

information for outcomes and effectiveness research.

- o A work group, cochaired by the Blue Cross and Blue Shield Association and the Traveler's Insurance Company, will promote the routine use of efficient electronic data exchange among payers, hospitals, physicians and other health care providers.

Through these work groups, as well as through current discussions with our members about national health reform, we are evaluating how administrative reforms can best be accomplished. We believe providers and payers can collaborate to bring about these needed reforms. Such an effort can be successful only if all parties agree on the need to reduce administrative costs across the board rather than to pass them along to other parties.

We recognize that there may be a need for legislative mandates to enforce certain administrative reforms. The critical point is that we must move past identifying problems and begin expeditiously to implement changes that will reduce administrative costs. If we determine that ongoing efforts by the private sector cannot accomplish the needed reforms, then legislative mandates must be considered if we are to first reduce, and then keep administrative costs to a reasonable level. What mandates are needed and what those might look like will be clearer after we have worked through these issues within our current discussions.

Once we achieve standardization, all payers will reap the benefits. Using the UB-82, for example, does more than just streamline hospital paperwork. It also has helped its users, like Medicare and some private payers, to move to electronic billing and claims processing. Today, a substantial portion of Medicare and Blue Cross plans' bills, which for most hospitals represent the bulk of their billing, are electronically submitted by hospitals. Although hospitals send in a much smaller percentage of bills electronically to other payers, many of these bills require additional information. Again, this means much greater administrative burdens and costs for hospitals.

Reducing the administrative cost of health benefits administration also will clearly involve increased electronic movement of insurance and patient information. Unfortunately, many mistakenly view computerization as a panacea and may be lulled into believing that computerization alone will save money. For example, computerization of billing data could save money for insurers but could result in added costs to hospitals and other providers if insurers requested even more data than they do now.

Computerization--automating the patient record, and the entire process of billing, claims processing and payment--cannot occur without first standardizing all these elements. Computerization without standardization is expensive, wasteful, and can merely transfer administrative costs from payers to providers and patients.

While we believe that savings can be achieved by standardizing and computerizing some of our current administrative functions, the success of these efforts is limited under our current health care system. Ultimately, significant savings can only be achieved through a restructuring of our health care delivery and financing systems that reduces the emphasis on individual transactions and increases the focus on clinical appropriateness and patient outcomes.

Hundreds of hospitals across this nation have spent more than two years discussing the pressing problems with our health care system. Based on these discussions, we have developed a strategy



for health care reform that will restructure our system to provide health care to all at an affordable cost. It is through this strategy that basic changes can be made in our health care system that will lead to the simplification of administrative processes. This simplification will reduce both administrative costs and patient confusion.

#### AHA'S BROADER REFORM VISION

The strengths of our current pluralistic system must be maintained in order to promote choice, innovation, and the flexibility and creativity to meet local community health care needs. But the coverage gaps and conflicting incentives for patients and providers in our current financing and delivery systems result in both access and cost problems, including unnecessary administrative costs.

Successful health reform in this country will have to address the competing goals of expanding access and containing costs. The challenge is to find an acceptable balance between providing more access to health care services while at the same time conserving health care resources and dollars. We think we've got a good idea for meeting both these goals.

#### Universal Access

Everyone must have access, at a minimum, to basic health care benefits. The AHA calls for a comprehensive basic benefits package covering the full range of services from preventive care through long-term care. Health promotion and preventive care services would be emphasized.

The AHA's proposal provides universal access to basic health care services through a pluralistic system of financing -- a combination of private coverage through the workplace and a new single public program consolidating and expanding Medicare and Medicaid. Catastrophic coverage would be provided under the public program for everyone, whether covered by the public program or in the private sector in order to guarantee that no one would be impoverished by the need for health care.

#### Cost Containment

The AHA has taken a strong position on responsible and effective cost containment. We believe real cost containment can be achieved primarily by restructuring health care delivery around community care networks that would realign incentives and encourage the efficient use of health care resources by everyone.

Community care networks would provide patients with integrated care organized at the community level. Networks would focus on the health status of their communities, would be responsible for all the health care needs of their enrolled population, and would coordinate patient care over time and across various provider settings. Patients could turn to their network for everything from preventive care to acute care to long-term care services.

To ensure economic discipline with a focus on health status, community care networks would be paid a risk-adjusted fixed payment per individual. This would provide the network with a fixed budget for promoting health and delivering care to its enrolled community. It would allow payers to manage their outlays, but leave the allocation of resources to local decision making.

The AHA believes the formation of community care networks should be promoted in the public sector by encouraging the Medicare and Medicaid programs to use networks and by providing financial incentives for beneficiaries to choose networks. In the private sector, network use should be encouraged by offering tax or other

incentives aimed at employers, employees, insurers, and providers.

Through networks we can substantially reduce administrative costs and eliminate patients' confusion over complicated billing systems. We would merge Medicare and Medicaid into a new public program; enroll beneficiaries of this new program in community care networks; give these networks a fixed payment per enrollee for providing needed health care services. This would lay the groundwork for a substantial reduction in the administrative burdens and confusion of current claims processing systems.

Enrolling privately insured people in community care networks would reduce administrative costs even more. Everything in the network, including administrative functions would work toward one goal--providing better health care services to patients and communities.

Finally, some have suggested that a single-payer system like the Canadian system would eliminate substantial portions of administrative costs. Some estimates, like those made by Woolhandler and Himmelstein, exaggerate the potential administrative savings associated with moving to a single-payer Canadian-styled health care system because they assume that all administrative costs, not just billing costs, would be reduced. While reductions in billing costs and other administrative costs might be expected, there is no reason to expect that all general administrative costs (costs associated with purchasing department medical libraries, auxiliary groups, etc.) would be reduced, unless specific budgetary cutbacks were made in these areas.

In fact, much less would be saved under such a system if the U.S. continued to collect the kind of information we currently have available. Data that would otherwise be collected through the billing process would have to be collected and processed through some other means, offsetting much of the savings attributable to reduced administrative effort. Moreover, our nation's current focus on treatment outcomes and research on the effectiveness of health care services suggests that even more resources will be devoted to data collection in the future as we increase the quantity of clinical data reported.

#### CONCLUSION

Mr. Chairman, we applaud your efforts to reduce the administrative costs of health insurance, and we join you in working toward that goal. The AHA is also committed to working toward a more far reaching solution to eliminate unnecessary health care delivery and administrative costs while achieving universal access to needed care. We know that the subcommittee shares these goals for reform, and we look forward to working with you to build a better health care system for the American people.

Chairman STARK. Thank you.  
Mr. Beauchamp.

**STATEMENT OF DAN E. BEAUCHAMP, PH.D., COPRINCIPAL INVESTIGATOR, SINGLE PAYER DEMONSTRATION PROGRAM, NEW YORK STATE DEPARTMENT OF HEALTH, AND PROFESSOR OF HEALTH POLICY AND MANAGEMENT, SCHOOL OF PUBLIC HEALTH, THE UNIVERSITY AT ALBANY, STATE UNIVERSITY OF NEW YORK**

Mr. BEAUCHAMP. Thank you, Mr. Stark, and members of the committee. My name is Dan Beauchamp. I was, until about a month ago, with the New York State Department of Health. I am now with the University at Albany. I am still directly connected with the Single Payer Demonstration Program, which I will describe this morning.

We believe this program, and similar initiatives now being undertaken in other States and in the industry, offer the most promising way to reform the American health care system, and have potential far and above the simple, but important, improvements in administrative efficiency.

We began our program with funding from the Robert Wood Johnson Foundation in 1990. We are designing a State-level strategy to create a claims clearinghouse, first on a regional basis and, ultimately, for the entire State.

Our interest in administrative reform called for a demonstration where we could test available technologies, we could develop new technologies, and we could look at broad policy issues which we think are so important in this issue.

We have two vendors assisting us in this effort. One is CIS Technologies, from Tulsa, OK, and the second is Wellmark Inc., from Westlake Village, CA.

Our system, in the regional demonstration, has roughly 30 hospitals with a total of 12,000 beds. We now have four hospitals connected. By next week, we will have six hospitals connected. We expect all 30 hospitals to be connected within 4 months.

We are creating a claims clearinghouse that generates clean claims, as the industry refers to them. These claims are entered electronically, edited automatically, and transmitted to insurers by a central clearinghouse.

We plan, at later stages of this program, to use electronic funds transfer, to integrate coordination of benefit technologies, and to create eligibility information at the point of entry into the system.

Our program will conclude its first 2-year phase in November this year. We have applied for a 2-year extension with the Robert Wood Johnson Foundation, where we would take this regional program to the entire State on a voluntary basis.

Based on our experience in this region, we expect roughly half of the State's 250 hospitals to voluntarily cooperate. I must stress that this entire effort has been a voluntary one, and we are very pleased at the cooperation we have had from the hospital industry in the State of New York.



We also expect that physicians' practices and clinics, around 150 in all—will join in that statewide demonstration, which will begin in the fall of this year.

I want to conclude by saying that we technocrats can easily lose sight of the large policy and political meaning of the clearinghouse technologies, and their promise for health care reform.

Claims clearinghouses developed under public aegis, and depending on the larger political environment, offer the United States the option of moving very close to a single-payer type health care system, while retaining private insurance. This system, which might better be called a universal, rather than a single-payer system, could use a single health benefits card, could reduce paperwork to a very low level, and could determine eligibility easily and instantaneously for an entire State or the Nation.

This system could pay all doctors and hospitals through a single source, quickly, effortlessly, and in advance, rather than on a per-bill basis. This capacity can be coupled with a system that uses all-payer rate setting schemes, such as we have in New York for the hospital industry. It can even shift to budgets for hospitals and fee schedules for doctors.

Thus, the clearinghouse offers the Nation the prospect of eliminating many, if not most, of the many drawbacks of utilizing employment-based insurance in a universal environment. No longer do we face the choice of either eliminating private insurance or living with the inherent inefficiencies of myriad payers of health care. Coupled with major reforms in how insurance operates, we can retain private insurance companies within a universal context, one which employs the same techniques for controlling health care spending used by countries which have unitary sources of financing.

More than these changes, the claims clearinghouse offers the Nation the opportunity to help move the health insurance industry on to more important challenges than processing paper claims. From managing and exploiting the clearinghouse technologies developing before us, to developing more efficient networks for providers, to making the health care system easier to use and negotiate for the individual patient and consumers, health insurance companies need to rethink their rapidly changing futures.

Thank you very much.

[The prepared statement follows:]

Statement of Dan E. Beauchamp, Ph.D.  
Co-Principal Investigator\*  
Single Payer Demonstration Program  
New York State Department of Health

Testimony Presented to the  
Committee on Ways and Means  
Subcommittee on Health  
U.S. House of Representatives

#### Information Technology, Administrative Simplification, and Health Care Reform

April 2, 1992

Mr. Stark, members of the Committee. I am grateful for the opportunity to discuss the ways in which computer technology can completely remake the way we manage the health care system. We believe the place to begin reform is by changing the complex and wasteful ways insurance companies and public programs like Medicare pay doctors and hospitals. The New York State Department of Health's Single Payer Demonstration Program, funded in part by The Robert Wood Johnson Foundation, is tackling this big job head on. We are excited by the potential of our project for administrative simplification and health care reform. We believe that the revolution promised by computer technology may present the single most promising window of opportunity we have to reform the American health care system.

As we all know, the issue of runaway costs for paperwork and administrative costs in health care has moved to the television screens and to the front pages of our newspapers. The cause of these rising costs is not hard to find.

Each insurance company, and Medicare and Medicaid as well, sets up its own rules for adjudicating and paying bills. Each company specifies that doctors and hospitals must play the game by its own rules. Each company insists on checking every claim for conformance to these rules. Each insurance company sets out its own rules for controlling costs. Because each hospital faces dozens of insurance companies, hospitals and physician offices must constantly expand their administrative staff and operations to cope with scores of new rules for the billing and payment game. Because the billing and payment process is so complex, it can take months for hospitals and doctors to receive payment for their services. Because there are hundreds of insurance companies, the prospect of system-wide standards is poor to non-existent.

Hence the paradox: given multiple sources of payment, the struggle to control and manage costs usually adds more costs and complexity to our health care system.

The New York State Department of Health, through the Single Payer Demonstration Program, hopes to change all this. We frankly seek to revolutionize the health care billing and payment system in our state and the nation. With support from The Robert Wood Johnson Foundation, we have entered into a partnership with 28 hospitals in the Eastern region of New York to design and demonstrate efficient computer-based electronic billing and payment systems. Through a competitive bidding process, we selected two health information systems vendors to provide computer systems support. Hospitals entered into individual contracts with these vendors. Major payers operating in corresponding areas of the state agreed to cooperate with the Demonstration Program and its information system vendors to expand the use of electronic billing.

We took this step because we saw a whole new technology rapidly coming into the health care market and poised at untangling the administrative thicket. Insurance companies and information technology companies alike are moving to develop computer-linked solutions to the sprawling red tape-filled system. One example is the Blue Cross OMNIPRO system which handles Blue Cross and Medicare claims transmitted by hospitals on dedicated terminals. Also, the National Electronic Information Corporation (NEIC), a consortium of commercial insurers, has shared the costs of developing an electronic claims clearinghouse linking providers with their

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member-payers, thereby further streamlining and coordinating the billing process for commercial claims.

Several information system corporations, such as our vendors, CIS Technologies of Tulsa, Oklahoma and Wellmark Incorporated of Westlake Village, California, offer "all-payer" electronic claims clearinghouse services. These clearinghouse vendors use computer-based products that accept billing information directly from a provider's existing information system. Using telecommunications linkages, these commercial products send billing information to payers either directly or through other proprietary electronic networks such as NEIC. Users of automated health care billing and payment systems, namely providers, payers, fiscal intermediaries, and third party administrators, are currently realizing important savings in administrative costs.

Will this new technology and its commercial applications solve the problem on its own? In a word, no. The emergence of this technology is a very positive and hopeful sign. Still, the need for government to demonstrate and evaluate this technology, and also to design an overall framework to exploit this technology fully, such as with the Single Payer Demonstration Program, is critical. For one, the pace of adoption by hospitals and doctors of commercial technology is simply too slow. Also, the commercial market is too often aimed at a hospital-by-hospital market development strategy. Providers are also suffering from system-wide gaps and problems. So far, the focus of technological change has been more on getting clean bills out of the door, and less on changing the myriad insurance company requirements that are at the core of the problem. Essential system-wide reforms such as electronic eligibility determination and automated coordination of benefits are understandably given a lower priority by commercial vendors. Moreover, where these services are included, the focus is more on optimizing the present system, rather than on thinking where that system should be heading. Little is being done to help the consumer to use the health care system more competently. Finally, the links between administrative reform and larger health system reforms are often ignored. Without some level of government oversight and involvement, it is unlikely that the full potential of this technology can be fully exploited.

#### **1. The Scope of the Single Payer Demonstration Program**

In 1990, New York State created the Single Payer Demonstration Program to develop a state-level strategy for addressing these shortcomings. Our interests in administrative reform called for a demonstration where we could test available technologies, attempt to develop other badly needed technologies, and identify opportunities for broad policy reforms, such as standardizing insurance practices and procedures. We are also exploring the options for overall public management of a statewide health care billing and payment program.

Both of the vendors selected to support the Demonstration Program, CIS Technologies and Wellmark Incorporated, link hospitals to payers through an electronic claims clearinghouse. The electronic claims processing system accepts claims from the hospital's information system, ensures that data meet payer specifications, and requires hospital billing staff to correct errors before sending claims to the payer for adjudication. The clearinghouse electronically sorts the claims and sends them to payers. For payers equipped to accept electronic data, the claims are forwarded from the clearinghouse over telecommunications lines rather than through the mail. In cases where payers accept only magnetic tape or paper, the clearinghouse converts the claims from electronic format into these media. The net result of clearinghouse-based claims processing under our model is that providers deal mostly with electronic claims. Variation in payer technological sophistication is accommodated by the clearinghouse.

We currently have four hospitals submitting electronic claims through vendor clearinghouses, and we anticipate adding the remaining 24 facilities within four months. The claims received by payers from Demonstration Program hospitals are "clean" in that all of the information required is present, and it is in the format specified by the payer. Experience with electronic claim submission has shown an increase in acceptance of claims on first submission from 50 percent to over 90 percent. The new system is resulting in more efficient and rapid claims production, reduced error processing by both providers and payers, and reduced staff involvement in claims production. Significant savings in administrative costs are anticipated as a direct result of this Demonstration Program both at the provider and insurer end. Provider cash flow is expected to improve significantly as days in accounts receivable are reduced. We fully anticipate that ongoing provider savings



will significantly exceed the costs of vendor contracts for these electronic billing and payment services.

We are beginning to make progress with payer claims processing as well. As a direct result of the Demonstration Program, the New York State Medicaid program has agreed to accept electronic claims from Demonstration Program clearinghouses.

We are expanding the electronic claims processing network to automate other sources of administrative inefficiency in the areas of billing and payment, such as point-of-service insurance verification. The system being developed will allow providers to electronically query payer enrollment files to verify enrollment, to determine coverage levels, to determine the need for pre-service utilization controls such as second surgical opinion, and to determine patient deductibles and co-payment requirements. The growth of managed care programs makes such eligibility information at the point of service even more critical.

The clearinghouse network will provide electronic, on-line management reporting and claims status checking needed by health care providers for administrative operations. The clearinghouse will connect with the New York State Department of Health to accommodate statutory data reporting programs.

The Demonstration Program also includes a study aimed at identifying opportunities for standardization in payer billing requirements. Specifically, we are working with providers and payers to reduce the variation in (1) payer data requirements and formatting specifications, (2) payer requirements for attachments and documentation in billing, and (3) payer requirements for pre-service utilization review, e.g., second surgical opinion and preadmission certification/review. As a direct result of the Demonstration Program, and as just one example, the State Medicaid program has agreed to discontinue using a long-standing requirement for claim attachments. This type of change simplifies provider claim processing and increases the volume of claims that can be routed electronically.

A claims clearinghouse opens the way to major health care reform. The clearinghouse can serve as a bridge to a single payer system, along the lines of Canada, or an all-payer, employment-based system. The question "Who runs the clearinghouse?" is a central one, and will certainly generate significant political interest. The Single Payer Demonstration Program is exploring the governance options for a statewide single payer health care financing system that includes a claims clearinghouse. Working with a panel of national experts, we are producing a report that sets guidelines for the selection of a governance model and identifies both policy-level and operational considerations that are critical to this decision.

Foundation support for the first phase of the Demonstration Program will expire in October of 1992. The Department of Health has submitted to The Robert Wood Johnson Foundation an application for continued funding support. The proposed continuation of the program will include evaluations of the regional demonstration program and its impact on provider costs and operations. More importantly, however, it will include statewide expansion of the clearinghouse network and its related technologies on a voluntary participation basis. Based on our experience with the regional demonstration, we anticipate that half of the state's 260 hospitals and an equal number of physician groups and clinics will volunteer to participate.

We propose to develop and demonstrate automated systems for coordination of benefits and electronic funds transfer. We will conduct limited demonstrations of a scheduled provider payment program, a single card insurance verification system, and electronic linkages to employers and benefit plans. To simplify health care billing for patients, we also plan to design and test automated systems that will support consolidated patient billing managed by the clearinghouse and we will design a simplified standard explanation of benefits form. We will design collections capabilities, and continue our work on uniform data requirements for third party billing and payment while promoting parallel standardization activities already underway at the national level.

We will conduct research into alternative vendor and clearinghouse configurations, the limits of clearinghouse technologies in health care administration, and the feasibility of a national network of statewide health care claims clearinghouses. We will also project the impact of full statewide implementation of the claims clearinghouse technologies with respect to health care system costs and operations. A technical implementation plan for the development and operation of a statewide claims clearinghouse with the advanced technologies demonstrated in the Single Payer Demonstration Program will be produced.

## 2. Policy Implications

The Single Payer Demonstration Program is the only program in the country attempting to link technological advancement in health care administration to the public policy debate surrounding health care reform. We see the Demonstration Program and administrative reform as a strategic innovation with significant implications for cost control and, therefore, expanded access to health insurance coverage. One of the most appealing features of administrative reforms being demonstrated in New York State is their applicability to the multiple payer as well as single payer financing systems. Technology has the potential to make a multiple payer system approximate the administrative efficiency of single payer systems. It also offers the easy transition to more direct control of spending with all revenues flowing to providers through a single source.

States will play a key role in the 21st century's reformed health care system. Sufficient critical direction from state governments is needed to assure the development of an electronic infrastructure that supports a strong state role. Individual state efforts in administrative reform should occur within national guidelines that sets or adopts standards. The Congress can play a significant role in assuring that technological development in statewide health administrative reform programs culminates in a comprehensive and integrated system. Failure to do so would certainly open the door to fragmented systems that would be difficult, if not impossible, to link "after the fact." Only with a nationally coordinated effort can we ensure that the United States will move toward a comprehensive and unified technological infrastructure for health care reform.

We technocrats can easily lose sight of the larger policy and political meaning of the clearinghouse technologies, and their promise for health care reform. Claims clearinghouses, developed under public aegis, and depending on the larger political environment, offer the United States the option for moving very close to a single payer-type health care system while retaining private insurance. This system, which might better be called a universal rather than a single payer system, could use a single health benefits card, could reduce paperwork to a very low level, and could determine eligibility easily and instantaneously for an entire state or nation.

This system could pay all doctors and hospitals through a single source, quickly, effortlessly, and in advance, rather than on a per bill basis. This capacity can be coupled with a system that uses all-payer rate setting schemes, or which even moves to budgets for hospitals and doctors.

Thus, the clearinghouse offers the nation the prospect of eliminating many, if not most, of the many drawbacks of utilizing employment-based insurance in a universal environment.

No longer do we face the choice of either eliminating private insurance, or living with the inherent inefficiencies of myriad payers of health care. Coupled with major reforms in how insurance operates, we can retain private insurance companies within a universal context, one which employs the same techniques for controlling health care spending that countries use which have only unitary sources of financing.

More than these changes, the claims clearinghouse offers the nation the opportunity to help move the health insurance industry on to more important challenges than processing paper claims. From managing and exploiting the clearinghouse technologies developing before our eyes, to developing more efficient networks for providers, to making the health care system easier to use and negotiate for the individual patient and consumers, health insurance companies need to rethink their rapidly changing futures.

The claims clearinghouse opens the door for the rapid introduction of information technology into the hospitals and doctor's office on a system-wide basis. In my view, this is the future for private insurers in this country, one in which they help move the health care system from its present preoccupation with technology to one more focused on getting badly needed information into the hands of the public, to doctors and hospitals, and to public officials.

Chairman STARK. Mr. Gradison.

Mr. GRADISON. I have no questions.

Chairman STARK. Mr. Beauchamp, would it not be better if we were going to design a system that, let us say, would be used by Medicare, if, at some point, we had a system where the data protocols would at least not exclude your system from operating over the same network?

It seems to me that it is conceivable that that could happen. Is that not correct?

Mr. BEAUCHAMP. It would be extremely unfortunate if our system, with its larger public policy caste were somehow difficult to integrate into a larger Medicare system. Yes, sir.

Chairman STARK. Or, would it be better if your constituents and ours had the same number?

Mr. BEAUCHAMP. Absolutely. I like the Social Security number for the same reasons you do.

Chairman STARK. I am just trying to suggest that your efforts, I think, point out the need for us to do something, because if other States follow your excellent example—Maryland, Hawaii, California—and we end up with a bunch of computer-based systems that cannot talk to each other, it is either going to be more expensive for you to change, or a whole lot more expensive for us to design a system that will accommodate 50 different systems. And there is no real reason for this, if the design parameters are out there for you to work with from the get-go.

Mr. BEAUCHAMP. Hopefully, yes, sir. Hopefully, the technology is such that the clearinghouse technology itself can operate across State lines, in a national environment, with the cooperation of Medicare, with HCFA, and other things, and can have some variance in it. That is the superb resiliency of this technology.

The States, themselves, can add capacity, shall we say, to that system, and can add innovations.

So, I think we have enough flexibility there, but it certainly needs to be carefully monitored, yes, sir.

Chairman STARK. Mr. Johnson, it has been suggested that one of the most vexing problems that hospitals have is lack of information about eligibility and benefits available when the patient is still in the hospital or seeking admission.

Would not an on-line system, or an encoded card—on-line, I tend to like better, but would that not simplify life for hospitals a great deal?

Mr. JOHNSON. Absolutely, Mr. Chairman.

Chairman STARK. Well, it seems that you both would be supportive of this. Has the AHA had a chance to look at Mr. Beauchamp's system? I mean, shall we just take his system?—we could cut these hearings short—and try and spread it around the country?

Mr. JOHNSON. No, Mr. Chairman, and, in fact, as he has indicated, his 2-year demonstration project is just nearing completion, and we have not had an extensive chance to review that, but certainly we would look at it.

Chairman STARK. Mr. Beauchamp, how do you expect Medicare could work with your system?

Mr. BEAUCHAMP. Well, the most important way in which Medicare could work is really through integrating its own efforts at au-



tomation through the whole matrix of all payers, and in a clearing-house technological framework.

I think that if we had the opportunity to formally cooperate and experiment with ways in which we in New York, through this demonstration, could make life easier for hospitals, for doctors, and for patients, not only for Medicare, but for Medicare and every other payer operating at the same time, we would learn many important things that I think would benefit, not only New Yorkers, but would benefit the development of the national system.

We could do that in very quick order.

Chairman STARK. Are you in touch with these Medicare and HCFA task forces?

Mr. BEAUCHAMP. Not with the task forces. Other people in the department of health, sir, have been in touch with them, and Mr. Ray Sweeney, I believe, who is my colleague in the management of this program, has been. Obviously, we have been in touch with Medicare itself, as we have developed this project.

Chairman STARK. So, are you guys working hand-in-glove? Will your systems—

Mr. BEAUCHAMP. It is my sense, Mr. Chairman, that at the Federal level, and through these task forces, there is more emphasis upon the industries, and more of a private initiative being developed there, and less concern with the policy framework in which this technology is being developed.

And I think the framework for the States is important. Nearly everyone seems to agree that in the health care system of the future, the States have an important role. There is a very important way in which States can play a useful role, and it is known to everybody. It is a relatively noncontroversial role, at least in the administrative side of this. The happy circumstance is that we are working with the hospital industry where we are making their life easier, and not more onerous, and it has produced smiles where, before, there were frowns.

I hope that these task forces think about the policy context, and what States would do to manage the growth of this technology.

Chairman STARK. Thank you both very much. It has been very informative, and I appreciate your enlightening us this morning.

Thank you.

Mr. BEAUCHAMP. Thank you, Mr. Chairman.

Mr. JOHNSON. Thank you.

Chairman STARK. Our next panel of witnesses include Mr. Bernie Tresnowski, whom we welcome back, who is the president and chief executive officer of the Blue Cross/Blue Shield Association, whom he represents this morning; and Mr. Joseph Brophy, who is the president of managed care and employee benefits operation of the Travelers Insurance Co.

Gentlemen, welcome back to the committee. Bernie, would you like to lead off and enlighten us in any way you are comfortable? Your prepared remarks, without objection, will appear in the record in their entirety.

STATEMENT OF BERNARD R. TRESNOWSKI, PRESIDENT AND  
CHIEF EXECUTIVE OFFICER, BLUE CROSS AND BLUE SHIELD  
ASSOCIATION

Mr. TRESNOWSKI. Thank you very much, Mr. Chairman.

In my testimony, I lay out the Blue Cross/Blue Shield experience as a reference to the public discussion on health insurers' administrative costs.

In my statement, I make reference to Mr. Coyne's earlier question about the comparison of Medicare administrative costs to those of Blue Cross/Blue Shield, as well as a fuller description of what that comparison means.

Notwithstanding our own experience, or the cross-program comparisons, clearly our goal is to simplify the administration of health care financing in a pluralistic environment. To do so, we are ultimately talking about the management of complex information.

There are several industry initiatives already underway to simplify health care administration, and let me just summarize the two most important.

You made reference, earlier, to a major obstacle to the flow of information and the use of electronic communication in our industry being the lack of data standards. Communication has relied on proprietary relationships between individual players, instead of a common language. Much as the banking industry has done, we in the health care industry are now developing a common set of data standards, through the American National Standards Institute, which is fondly referred to as ANSI.

ANSI is the national coordinator of voluntary standards systems for the United States. To date, ANSI has developed and is currently refining standards to allow electronic interchange for transactions such as enrollment information between employer and payer, eligibility and benefit information between the provider and payer, and claims submission and claims payment between the provider and payer.

Establishment and industrywide acceptance of these standards will increase the value and the volume of electronic data interchange activity, thereby reducing administrative costs and, indeed, the hassle involved in the administrative process. Of particular importance is, as Mr. Sanders said earlier, HCFA's recent commitment to participate in ANSI, so that both public and private payers are working toward the same goals.

The second initiative, you are aware of. Last November, Dr. Sullivan convened a forum on administrative costs for the health care industry. Leaders from various sectors of the health care industry attended. A product of that forum was the formation of a national industry work group which is being cochaired by myself and Mr. Brophy, who you will hear from in a moment. He is the president of Travelers Insurance Co.

The work group for electronic data interchange contain a broad representation throughout the field—Blue Cross/Blue Shield plans, commercial insurance carriers, the Health Care Financing Administration, physicians, hospitals, the National Federation of Independent Businesses, and others.

We have adopted an ambitious goal, and that goal is to report and act on a plan to make electronic data interchange between payers and providers routine by 1994, and extend the benefits of electronic data interchange to the larger health care provider community, and to the administrators of health care delivery and financing, over the next 5 years.

This implementation plan will be submitted to the field and to the Secretary in July of this year. Given the broad representation and the cooperation of the various sectors of the industry, we expect widespread commitment to this issue.

We have met twice. We have a technical advisory group of 50 individuals. This group is divided into six areas, and are preparing white papers with recommendations on such topics as trends in the technology, any obstacles to electronic data interchange, confidentiality and legal issues, standard formats, implications of electronic data interchange, including any benefits and savings, and, indeed, some short-term strategies.

These papers will form the basis of the foundation of our final report that we will provide to the Secretary.

We have chosen to define our charge more broadly than the Secretary's original request to increase claims by 10 percent, by focusing, instead, on automating the full range of financial transactions.

Mr. Chairman, the most important point I would make in my summary is I believe much of what you hope to accomplish has been set in motion, as people realize that good public policy and good business sense converge in this issue.

We expect to complete our work, as I said in July, and we would be pleased to provide a copy of our report and its recommendations to the committee at that time.

Thank you very much.

[The prepared statement follows:]



TESTIMONY OF  
BERNARD R. TRESNOWSKI  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
BLUE CROSS AND BLUE SHIELD ASSOCIATION

We welcome the opportunity to address the subcommittee on the important matter of reducing administrative costs. As outlined in our proposal for health care reform, the Blue Cross and Blue Shield Association is committed to simplifying the health care system for both consumers and providers. Our proposal would require health insurance companies to meet minimum requirements relating to uniform billing, data collection and electronic data interchange.

After reviewing Blue Cross and Blue Shield Plans' administrative costs, I will discuss options for reducing administrative costs. These will include our work with the Workgroup for Electronic Data Interchange (WEDI), one of the groups on administrative costs supported by the Department of Health and Human Services.

#### I. ADMINISTRATIVE COSTS

Considerable attention has been given to the role of administrative costs in our pluralistic health care system. It is important to understand that, without question, a pluralistic system has higher administrative costs than a single payer system. While we believe these costs have value for the consumer, we recognize the need to make sure that these costs are as low as possible.

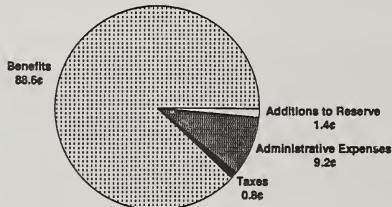
##### Blue Cross and Blue Shield Plan Experience

As the largest provider of private health insurance coverage in the United States, Blue Cross and Blue Shield Plans have a major interest in reducing administrative costs. It is part of our work to assure the most effective use of health care dollars.

We are proud of our performance. In 1990, the administrative costs of Blue Cross and Blue Shield Plans were 10 percent of total premium. When government taxes are excluded, our administrative costs were 9.2 percent of premium. (TABLE I)

TABLE I

#### Blue Cross Blue Shield 1990 premium dollars



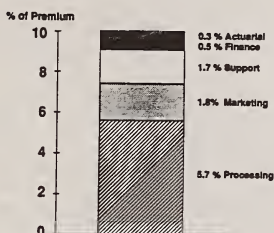
Source: BCBSA, NAIC Insurance Blanks

Our data incorporate administrative costs associated with all our health-related insurance products, including both fully underwritten and administrative services only (ASO) arrangements. They also cover all product lines, including traditional and managed care, in addition to supplementary policies such as Medigap, vision and dental

coverage. While the latter policies tend to have higher administrative costs as a percentage of premium -- due to a large number of smaller claims -- we believe their inclusion is important to reflect the diverse coverage choices available in a private system.

Processing activities comprise the largest portion of our total administrative expense -- 5.7 percent of premium. These activities include claims adjudication, premium collection, provider payment and the cost of technologies that assist these processes. (TABLE II)

TABLE II **Administrative Costs as a Percent of Premium**  
**Blue Cross and Blue Shield Plans 1990**



Source: BCBSA

Many of a pluralistic system's administrative costs should be -- but are not always -- part of a single payer system. For example, insurers in the United States incur significant expenditures in managing the appropriate use of services and controlling total expenditures. Activities such as review of services' medical necessity and development of clinical outcome measures can reduce total health care costs, but will contribute to administrative costs.

Blue Cross and Blue Shield Plans also devote considerable resources to evaluating the safety and efficacy of new medical technologies and the appropriate use of common treatments. In addition, the Blue Cross and Blue Shield Association's Technology Evaluation and Coverage Program (TEC) has completed more than 200 evaluations of medical equipment and procedures since 1985, making the Association an acknowledged leader in the field of technology assessment.

Finally, we commit significant resources to controlling insurance fraud. Many Blue Cross and Blue Shield Plans have divisions dedicated to uncovering and prosecuting illegal reimbursement schemes. Other Plans use their internal audit departments to discover fraud and abuse. These activities increase administrative costs in the short term, but produce substantial savings over time. For example, California Blue Shield's Special Investigative Unit has a full-time staff of five and an annual operating budget of \$300,000. The Plan estimates that the unit's work saved subscribers \$9.2 million in 1990.

#### **Administrative Costs of Government Programs**

The administrative costs of a pluralistic system frequently are compared to the costs of administering single payer programs such as the Medicare program. We agree that the absolute expenditure for administrative costs is important. But closer examination of administrative cost data does not support the contention that they show the private health insurance industry to be grossly inefficient. Although our administrative cost ratio is higher than the three percent commonly reported for the Medicare program, there are a number of important reasons for this difference.

First, Medicare's administrative funds purchase different services than private insurance. The most obvious difference is the uniformity of Medicare's benefit design which simplifies administration, but limits beneficiary choice and does not respond to the diverse market needs of the population under age 65.

Second, the private sector would not tolerate the lower level of claims review and other services that government funding accommodates. The government repeatedly has underfunded the administrative costs of the Medicare program in recent years. Medicare has dropped review procedures that would have been the bare minimum demanded by employers who purchase private coverage.

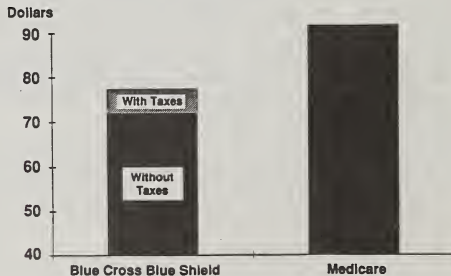
In addition, Medicare beneficiary services are underfunded. The most recent example is the 1992 Medicare contractor budget which -- as proposed by the Administration -- would have resulted in Medicare intermediaries being funded to handle fewer than one-third of expected inquiries from beneficiaries and providers. Furthermore, almost seven million mandatory hearings on disallowed Medicare payments -- about 70 percent of the total projected for next year -- will be backlogged for 250 days or longer due to budget cuts. Inadequate funding of administrative support for the Medicare program has resulted in billions of dollars in Medicare overpayments, payment delays, and the elimination of provider services such as toll free lines. These service reductions clearly demonstrate that Medicare can hold down administrative costs through practices which would not be tolerated in the private sector, where customer service and effective cost management are more highly valued.

Finally, the perceived efficiency of insurance programs is affected by the measurement used. Efficiency frequently is measured by the percentage of premiums spent on benefits versus administration. This approach can be useful in a number of ways: it is commonly accepted and easily understood, it facilitates comparisons across programs and countries, and it focuses our attention on the relationship to total health expenditures, our primary concern in the current environment. Nevertheless, biases associated with this measure can be significant. For example, the benefits-to-administrative cost ratio varies significantly with differences in benefit design and utilization.

The issue of measurement methods is readily apparent when we examine Medicare's administrative costs against our own using the measure of per capita spending on administrative costs. Blue Cross and Blue Shield Plans generated administrative costs of \$78.42 (with taxes), or \$72.83 (without taxes) per member in 1989, while Medicare's administrative expense was somewhat higher, at \$91.86 per member. (TABLE III) Not surprisingly, Medicare's older, high-utilizing population requires significant administrative support for each beneficiary. These statistics indicate a need for more rigorous cost analysis in the debate over the relative efficiency of private insurance and government programs.

TABLE III

**Annual administrative costs per capita:  
Blue Cross Blue Shield and Medicare.**



Source: BCBSA analysis, 1989 data



## II. INITIATIVES TO SIMPLIFY ADMINISTRATION AND REDUCE COSTS

While we are proud of our performance, additional steps should be taken to reduce administrative costs. With much of our administrative investment, and our overall approach to managing health care costs being rooted in the collection and use of data, we have undertaken a number of aggressive initiatives to improve efficiency in information management.

Our objective is to increase the use of electronic data interchange: the ability to exchange information electronically. Its ultimate goal is to simplify significantly the administrative process. The electronic exchange of information between various sectors of the health care industry will produce administrative cost savings through a reduction in paperwork, staff time and communication costs. In addition, the exchange of accurate information will enable us to identify patient needs more effectively.

Electronic data interchange also will benefit consumers by providing lower costs, quicker responses to questions and concerns, immediate knowledge of benefit eligibility, and improved access to care through referrals to the best facilities for specific procedures.

### Conversion From Paper Claims to Electronic Billing.

Blue Cross and Blue Shield Plans are the largest processors of electronic health care claims in the country and we are moving aggressively toward a paper-free environment. Approximately 79 percent of our Medicare Part A claims and 60 percent of our private sector hospital claims now are handled electronically.

A smaller proportion of physician claims currently are processed electronically, about 55 percent of Medicare Part B and about 20 percent of our private business. However, a number of Plans have aggressive programs to increase the number of physician offices and community providers with electronic links, including donations or subsidies of software, hardware, and maintenance. To streamline the insurance process for customers, Plans such as Blue Cross and Blue Shield of Alabama have required that all providers in preferred networks submit claims on behalf of their patients.

While our Plans have made substantial progress in this area, further steps can be taken. One of the primary barriers to greater use of electronic data interchange is a lack of uniform data standards. Payors, including government programs, currently ask providers to follow different information formats for electronic claims submission and this discourages providers from submitting claims electronically.

To move the industry towards a data standard, Blue Cross and Blue Shield Plans are working with the Insurance Subcommittee chartered by the American National Standards Institute. The subcommittee has developed, and currently is refining, standards to support electronic interchange among insurers for transactions such as enrollment, eligibility and benefits information, as well as claims submission and payment transactions. Industry acceptance of these standards will increase the value and volume of electronic data interchange activity, reducing administrative cost and "paperwork hassle." Of particular importance is HCFA's recent commitment to participate in these efforts -- enabling both public and private payors to work toward the same goals.

Workgroup for Electronic Data Interchange: A new initiative to address the barriers and move to electronic administration of private -- and public -- insurance programs began as a result of Secretary Sullivan's Forum on Administrative Costs. I volunteered to co-chair the national Workgroup for Electronic Data Interchange (WEDI).

The mission of this workgroup is to "promote the routine use of EDI among payers and health care providers by 1994 and to extend the full benefits that EDI can bring to the health care community over the next five years."

Originally I was skeptical about this effort and its ability to develop solutions to this difficult issue. However, as the effort has evolved, I have become increasingly impressed by the cooperation among the members of this group and the commitment each member has to developing viable ways to achieve administrative simplification.

The efforts of the Workgroup for Electronic Data Interchange, I believe, will lead to significantly reduced transaction costs across the health care industry and alleviate paperwork burdens for both consumers and providers. Most importantly, we can improve the quality of the information that shapes health care delivery. This workgroup is composed of insurers, providers, government and business representatives.

We will provide our final recommendations, including an implementation plan, to Secretary Sullivan and the health care community in July 1992. The recommendations will cover the following topics: trends and technology, obstacles, confidentiality and legal issues, standard formats, implications (e.g., benefits, savings), and short-term strategies. We expect widespread commitment to implementing these recommendations given the representation and cooperation of the various sectors of the health care industry in the workgroup. We are exploring possible demonstration projects between HCFA, private payors and providers and employers so that they may lead by example.

Finally, we have sought to open the process as widely as possible to enable us to gain broad public input and to monitor new developments. The level of cooperation we have encountered has been exceptional.

#### On-Line Eligibility/Benefit Verification.

In addition to focusing on claims processing, which has been a traditional target for automation, we have been expanding services that directly decrease provider administrative costs. Many Blue Cross and Blue Shield Plans have on-line eligibility and benefit verification capabilities that enable providers to obtain patient insurance and benefit information at the time of service. This streamlines operations in physician offices, hospitals and other health care facilities.

#### Electronic Card.

Another area that has received increased attention is the electronic card -- or so called "smart card." Electronic cards could be used to trigger eligibility, link a patient's credit card with their co-payment or even provide portable medical histories. While we are interested in this technology, we have concerns about patient confidentiality when these cards are used to store patient medical information. We believe significant research is needed before "smart cards" can be considered for widespread use. There are a number of methods for accomplishing electronic links and the card is just one of them. We are continuing to explore a number of options.

To explore the promise of this technology, several Blue Cross and Blue Shield Plans have invested in test programs involving electronic cards. The tests, thus far, have found electronic cards to be an expensive avenue for eligibility and benefit verification capability. Large capital investments are required to develop equipment, software, standards and training. Also, a backup records system would be required to provide data in the event of a misplaced card.

#### Electronic Funds Transfer/Electronic Remittance Advice.

We also are exploring electronic transfer of funds from the insurer directly to the provider. This application would benefit providers by allowing them to maintain a better cashflow with faster posting of their own accounts and less administrative effort to collect that payment. Several Blue Cross and Blue Shield Plans already are offering or experimenting with these services.

In exploring all these options for reducing administrative costs, we are careful to keep in mind that there are costs involved in implementing the technology required for electronic exchange. These costs include hardware and software, staff resources and time required to implement and learn the process. For small volume providers, there is concern that the cost of electronic data interchange would exceed the benefits. Our Plans often have addressed this issue directly through financial incentives, including free or discounted technology and maintenance. However, the key to widespread adoption of the new technology is the creation of a universal system.

Finally, we are examining a number of other potential barriers to electronic data interchange. These include confidentiality concerns, legal and regulatory barriers, provider and consumer resistance to change, and the lack of incentives to providers to adapt to a new system.

Thank you for the opportunity to share with you our views on the administrative costs of health insurance - including their measurement - and our work to achieve our goal of simplifying the administrative process while reducing its cost.

We are seeking this not only for our own customers, but for all Americans. This is why we are working cooperatively with government, with providers and with other insurers, sharing the experience and expertise developed over more than six decades of service for the American people.

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Chairman STARK. Thank you.  
Mr. Brophy.

**STATEMENT OF JOSEPH T. BROPHY, PRESIDENT, THE TRAVELERS INSURANCE CO.; COCHAIR, WORKGROUP ON ELECTRONIC DATA INTERCHANGE; AND HEALTH INSURANCE ASSOCIATION OF AMERICA**

Mr. BROPHY. Good afternoon, Mr. Chairman. I am Joe Brophy. I am president of the Travelers Insurance Co. I am wearing two other hats, as a representative of HIAA, the Health Insurance Industry Association, and as cochair of the Workgroup on Electronic Data Interchange.

I might add, I am also a technician. My remarks here today are very much influenced by what I have done over the years as a paramedic and as a computer programmer. I have designed computers. I have programmed computers and weapons systems, and I have built health care systems for large companies and small companies. I worked for many years as a member of the American National Standards Institute developing the standards for COBOL. I regularly visit the laboratories—like recently, Bell Laboratories and IBM Laboratories.

I need to tell you that I am extremely optimistic. I am very, very excited about the opportunities that are present with the technology infrastructure that exists today to reduce cost—administrative cost—reducing unnecessary costs in our system, both short term and long term. Significant opportunities are here to provide better information that will lead to better decisionmaking, that will lead to improved quality in health care in this country, and even more importantly, an opportunity here to create millions of jobs in this country, as we export our medical technology to the rest of the world.

Just as we have the best military technology and the best agricultural technology, we do have the best medical technology. We have the infrastructure in place to create jobs in this country by exporting that technology abroad.

Underlying this, there are a few components or phenomena that I would like to mention. There has been, as long as I can remember in my business life a phenomenon here, that I refer to as a “doubling phenomenon.” I remember back in 1965, when IBM created the first chip for their computers. Technology or the price performance of that technology has been doubling every year. And when it doubles for 10 years, you get a thousandfold improvement. As it doubles for 20 years, it is a thousand squared, or a million. And as it doubles for 30 years, as it has been doubling, we find a phenomenon of nearly a billion components per chip.

I think the experts, within the laboratories of Bell Laboratories and IBM will tell you that the doubling phenomenon will continue through their lifetime, the implications of which are that CT scans and other types of technology will be affordable household items before the end of this decade. They will tell you that all medical knowledge will be in computer memory, not on large mainframes, not on disk drives, but in the memory of personal computers before the end of this decade.

Consistent with that is the fact that knowledge in our society—according to recent studies at your alma mater, Mr. Stark, MIT—show that knowledge is doubling every 20 months. You connect that with some of the demographic phenomenon that is occurring. Not only here, the fact that we have had an aging population for a number of years, but the Japanese, for example, this year, will begin to age significantly faster than we do. It does provide an opportunity for us to share and market our technology.

We are going to have a significant long-term care problem in this country. This electronic data interchange is absolutely essential so that I, as a citizen, can receive my long-term care at home. I very much expect, when I retire, to be monitored—my health to be monitored—through the computers at Travelers Insurance Co.

I think of all of these opportunities. It is not rocket science. Nothing has to be invented. We do not need sophisticated technology. We do not need sophisticated smart cards. We need to use the simple, tried-and-true technology that is available today.

Thank you.

[The prepared statement and attachments follow:]

## TESTIMONY

OF

JOSEPH T. BROPHY, PRESIDENT

THE TRAVELERS INSURANCE COMPANY

Good morning Mr. Chairman and Members of the Health Subcommittee. I am Joe Brophy. I come here today wearing three hats -- as co-chair of the Workgroup on Electronic Data Interchange (WEDI), along with my colleague Mr. Bernard Tresnowski of the Blue Cross and Blue Shield Association; as President of The Travelers Insurance Company; and on behalf of the Health Insurance Association of America (HIAA).

At Travelers, I direct the Managed Care and Employee Benefits Operation, one of the nation's largest and fastest growing managed care providers. In just three years, our organization has gone from a start-up operation to one with more than \$10 billion in 1991 premium volume and a rapidly expanding and cost-effective managed care program.

We have several million customers in our managed care programs as follows: wellness (690,000), psych and substance abuse (1,318,000), dental (587,000), medical utilization review (3,261,000), and comprehensive managed care (400,000). We process 74 million claims per year and handle 62,000 telephone calls per day.

The total number of people covered under The Travelers new nationwide comprehensive and flexible managed care plans increased fourfold last year to 400,000. We will exceed 600,000 by year-end. This new rapidly expanding program is called CareOptions. It provides patients with choice at point of service. The patient can choose to remain in the network of providers for care or go out of network. The Travelers manages care both in and out of network.

One of the main reasons that The Travelers was able to move so quickly and successfully into managed care was the comprehensive use of information technology. We have applied existing technologies to virtually every aspect of our operations -- from claims administration to medical management.

This spirit of innovation and excellence has not gone unnoticed. On Tuesday of this week, The Travelers flexible and comprehensive managed care system, called "CareOptions" was awarded the Management Information Systems Summit Award for Information Technology Excellence by the National Managed Health Care Congress here in Washington.

It is clear people want flexibility similar to programs like CareOptions. Unlike many HMOs, our CareOptions program give patients flexibility by allowing them to choose physicians inside or outside of our managed care networks. Our information technology gives us the capability to medically manage both types of providers.

Mr. Tresnowski provided you with details on the Workgroup on Electronic Data Interchange, its mission and charge, and our progress to date. Today, I would like to provide the Subcommittee with an overview of how technology can work, the current state of information technology in the health care field, and the benefits which we can anticipate from the use of available technology.

For the record, the HIAA supports Secretary Sullivan's goal of a paperless health care system. We perceive it to be a win-win-win situation: consumers, insurers and providers all win from reduction of cost, elimination of the paperwork hassle and an increase in the timeliness and quality of information.

The HIAA believes that the government should ensure the proper environment to allow EDI to flourish, but should refrain from micro-managing the process. Government payment



programs should be given the flexibility to participate as equal partners with the private sector. Incentives should be the tool of choice to encourage EDI development rather than penalties and mandates.

#### WHAT IS EDI?

Simply put, electronic data interchange is a way to transmit data and information from one place to virtually any other place in the world in a reliable, secure and easy manner. Central to the process of information exchange are standard coding conventions and formats that enable one type of computer to understand another type of computer. Like people, if computers do not understand each others protocols and language, communication is difficult, if not impossible.

A good example of EDI standardization -- one we all undoubtedly take for granted -- is the telephone. Another example is the American National Standards Institute (ANSI) Standard X.400, that enables people at The Travelers, and members and staff of the Congress for that matter, to send electronic mail messages to virtually any major corporation or political body in the world.

Chart 1 illustrates how claims are transmitted today. This chart is really an oversimplification of a very complex, laborious activity that is expensive, time consuming, redundant, prone to error and prone to perpetration of fraud.

Chart 2 illustrates how claims could be processed today if all parties used the same standard.

The mission of the Workgroup on Electronic Data Interchange is to facilitate agreement on the use of a common standard among the many constituencies that need to communicate electronically. The immediate by-product would be reduced administrative expenses but there are other important advantages that also inure to our health care delivery system.

Chart 3 illustrates the players to include at a minimum hospitals, physicians, pharmacists, laboratories, payors, banks, employers, employees, government, and the community.

WEDI does not plan to develop the standards. Standards are appropriately developed through a consensus process by standards organizations, such as ANSI, with the assistance of highly-specialized expertise. All proposed standards developed by other specialized standard setting organizations can and should be channelled through the disciplined ANSI process for consensus and agreement.

#### HOW DOES EDI WORK?

I would like to provide you with an overview of how EDI works. I will use claims administration as an example along with the Chart 3 - Future Network Architecture.

I must also point out that the Future is Now. Nothing has to be invented. All of the components in Chart 3 are working today. All of the technology components are available and working today. These capabilities, however, are being underutilized because of lack of published standards. Most of the differences in data requirements among the players are trivial, non-essential format differences. Many data fields are absolutely identical but are labeled with words that are synonyms of each other or acronyms or technical institutional jargon.

Please follow the four building blocks in Chart 3:

1. Building Block #1: Standardized Transactions

More than 450 claims forms now exist. We need to reach agreement on one. We will also need to agree on a standard for eligibility, payment, enrollment, utilization review, and clinical data, respectively. Developed on a parallel basis, work is progressing rapidly on all standards. The claim and billing standards will be ready in a few months.

2. Building Block #2: Data Locators

Data locators are nothing more than identifiers or addresses of where data files are stored. They are similar to the addresses stored in your credit and bank cards. Rather than having one "gigantic computer center" for universal access, data can and should be stored in local computers for security and efficiency and practicality. Data should be stored where it makes common sense such as hospitals, doctors' offices, employers and payors. To access data through EDI, authorized users need a password.

If I were traveling and needed medical care, the provider could use my health card to access required data about me; for example, details about my benefit plan. The data locator on my health card would be transmitted through clearing house switches to connect the provider with the appropriate data base in my HMO, or Blue Cross plan or insurance company of choice.

The provider could also access my medical history and electronically record the diagnosis/treatment.

3. Building Block #3: Clearinghouses

Clearinghouses ensure that data is accurate, in the right format, and appropriately delivered with control totals and audit trails. Clearinghouse services exist in both the private and public sectors. Clearinghouses charge a transaction fee which decreases with increasing volume.

4. Building Block #4: Implementation and Integration

This is the final building block. Agreement on standards will permit integration. Integration will occur rapidly. Vendors will waste little time in implementing standards to gain a competitive edge for their products and services.

The gains in efficiency and improved service delivery through EDI are so compelling that market forces will accelerate the conversion.

WHAT ARE THE BENEFITS OF EDI?

I would like to describe the primary advantages that EDI brings to the health care delivery system.

1. Less Hassle

Most, if not all, paperwork will be eliminated. Many Americans already use a "card" for certain medical and pharmacy services identifying their benefit plan.

What is missing from these cards is the "magnetic stripe" on the back. When we agree to a common standard, health cards will contain a magnetic stripe and paperwork can be eliminated.

## 2. Reduced Costs

Providers can reduce administrative staff. Payors can reduce clerical staff. Employers and employees will pay less for health care administration as well as health care.

Electronic data interchange enables transaction processing and administrative updates to occur instantaneously, if necessary, saving billions of dollars. EDI reduces fraud saving billions of dollars. EDI improves the quality of data capture by orders of magnitude, which improves decision making and health care delivery saving billions of dollars. EDI facilitates the dissemination of information on wellness programs and preventive medicine. EDI enables faster and more accurate resolution of workers compensation claims enabling workers to get back to work sooner. EDI will save tens of billions of dollars.

Currently many claims are handled or processed twice. For example, some providers have shortened their billing cycle from 30 to 15 days, resulting in queries and payments crossing in the mail.

Electronic data interchange will eliminate duplicative activity. Accuracy and quality of data will greatly be improved, reducing error correction and resolution activities, thereby cutting costs.

EDI will save tens of billions of dollars.

## 3. Faster Payment to Providers

Through electronic data interchange, providers can be paid daily. Phone calls can be reduced. Paper bills and mailings can be eliminated through electronic communication. Bank accounts can be credited through EFT (Electronic Funds Transfer) and account receivable files can be reconciled through ERA (Electronic Remittance Advices). Office administration and productivity can be improved with electronic prescriptions as an example. Paperless transactions means less postage, less office staff, less administrative costs, less hassle, and most importantly, improved quality.

## 4. Better Health Care

Access to better, more timely information leads to better decisions, avoidance of unnecessary procedures, and improved health care. Keeping abreast with the latest information is no small feat in our information intensive society. Although in limited use, the latest and very best information on medical treatments, protocols, drugs, outcomes research and other valuable news is available in electronic format. The potential for improved decision making and better health care using already existing information technology is virtually unlimited.

## 5. Fraud Control

EDI will result in a considerable reduction in the payment of fraudulent claims. Fraudulent practices can be



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identified more quickly using readily available software programs. In addition, only authorized providers and patients will be able to use the system. Questionable practices can be flagged. Finally, with standardized coding conventions and formats, the accuracy of both claims submission and payment will be significantly improved reducing the likelihood of overpayments while greatly speeding up cash flow.

#### 6. Privacy Protected - Improved Confidentiality

Some people are apprehensive that confidentiality may be compromised through EDI. In fact, confidentiality is actually substantially improved since significantly fewer people have access to specific claim transactions and medical information. Additionally, state-of-the-art encryption technology is available but not in wide use because it is really not necessary.

One of the unanticipated advantageous to consumers using ATM bank card technology is improved privacy.

#### 7. World Leadership - New Jobs in USA

Health care utilization increases with increased per capita disposable income. Health care utilization increases with the demographics of aging population. Commencing in 1992, Japan will age faster than the USA for a period of about 40 years. Similar trends are occurring in other countries.

The USA can export its medical technology creating many new jobs in this country. Please read "You Ain't Seen Nothing Yet", April 1988 issue, Forbes Magazine re technology forecast by Dr. Carver Mead.

No other country has the capability to put together a health care infrastructure technology. The technology that is currently in place -- both in systems expertise as well as the computers and networks in millions of locations nationwide -- gives the United States a tremendous competitive advantage.

Through the implementation of an EDI system, the USA can capitalize on a major strength. The USA leads the world in six important technologies that are synergistic: medical, food, and bio-technology, as well as supercomputers, microcomputers and software. The USA leads the world in agricultural technology and military technology. We have an even significant opportunity to export our medical technology.

#### OTHER ISSUES ASSOCIATED WITH EDI

Cost: Cost is a topic we all of us will address, but I want to take this opportunity to avoid some misconceptions. When I say the technology is already invented, I mean just that.

Providers will have a several choices in implementing electronic data interchange which depends on their volume requirements -- a mainframe, a personal computer, a card swipe or point of service device or a telephone. It's that simple. Technology and market forces will do the rest and do it affordably. Some say that those practicing in rural areas or solo practitioners will have difficulty implementing electronic data interchange. Nonsense. They'll only have difficulty, if they do not have a telephone. The Travelers

in cooperation with the Health Care Financing Administration (HCFA), developed and placed in the public domain free of charge, software to enable low volume providers, such as those in rural areas, the use EDI. The Travelers is enhancing the software for use by Medicaid.

Comparison to the banking industry: ATM cards are now as commonplace as drivers licenses, but the health care industry is just now getting serious about electronic data interchange. How could the banking industry electronically transfer funds ten years ago, while the insurance industry is just now getting started? The question is an important one. The answer reveals both the complexity of the health care system and the powerful role of technology in simplifying it.

1. Banking industry electronic transfer of information is much less complex than the health care industry. As a result, banking industry technology can be viewed as a precursor and building block for electronic data interchange in the health care industry.

The banking industry's electronic data transfer is relatively simple -- I believe approximately 100 characters are transmitted. It consists of a credit or debit. Dollars and cents are the units of analysis.

Electronic data interchange, as used in the health care industry today, has over 2000 characters. Its unit of analysis is an "episode of illness." What does that imply for electronic data interchange?

If you look at Chart 3 again, you can get a quick overview of all the parties affected in an "episode of illness." Banking transactions are just one of the many necessary transactions. To characterize a diagnosis, for example, there are more than 10,000 (ICD-9) codes (International Classification of Diseases - 9th Edition); for procedures and treatments there are more than 7,000 (CPT-4) codes (Current Procedure Terminology - 4th Edition).

At present, no uniform provider identification number (UPIN) exists and it was only last year that HCFA placed its Medicare uniform provider identification numbers in the public domain for cross validation purposes.

To complicate matters further, health care electronic data interchange must match many transactions in managing an episode of illness.

2. Today the cost of technology is affordable. Not only was the infrastructure not in place ten years ago, but the magnitude of investment would have been at least 10 fold and perhaps as high as 1000 fold greater for the health care industry.
3. While the government deserves much credit for leading the way in electronic data interchange for claims payment for hospitals and physicians in Medicare, its system has its limitations. It does not cover maternity, dental, disability, workers compensation, many areas of psychiatric coverages as examples.

WHAT ARE THE NEXT STEPS?

We know that the technology is available because it is all working today, the EDI system is appropriate and the system will provide significant benefits to all users. What are the next steps to make the system a reality?

1. Consensus

I cannot overemphasize the importance of consensus in developing national standards. As you heard from Barnie Tresnowski, the Workgroup on Electronic Data Interchange is designed with consensus in mind.

I cannot imagine a more diverse group of experts that have come together with a common purpose. The group includes commercial insurers, Blue Cross and Blue Shield, HMOs, medical and business associations, government and even a Nobel Prize laureate.

Another major and welcomed boost to the WEDI effort came when Gail Wilenski, in her role as Administrator of the Health Care Financing Administration, sent a letter for the first WEDI Steering Committee meeting reiterating that "HCFA is fully committed to participating in the ongoing effort by the American National Standards Institute to develop a standardized electronic billing format." A copy of her letter is attached.

Beyond the experts, however, the WEDI group has sought out the opinions of almost 3,000 potential system users, from physicians to hospitals to consumer groups to employers. We recognize that without widespread input and buy-in, the system will not achieve its full potential, no matter how well it otherwise works.

Similar to the formation and operation of the WEDI, we need a consensus process for standards development. This country has a very fine standards setting organization body called the American National Standards Institute ACCREDITED STANDARDS COMMITTEE X12.

Among its strengths are that its standards are agreed to by consensus of the major players implementing them. Secondly, in developing standards, the ANSI X12 process takes into account and incorporates international standards by working closely with ISO (International Standards Organization). In my view, ANSI X12 has the best process for achieving this consensus.

I speak with firsthand knowledge of ANSI because I was an active working participant on X3J4 for many years with respect to the development of the standard for COBOL V.

2. Caution

If you remember nothing else, remember one word "CAUTION." We caution Congress to resist the impulse to rush into legislative action on electronic data interchange and uniform standards until after the WEDI report becomes final this summer.

The completed WEDI report will provide ample information and recommendations on appropriate actions which will lead to prompt implementation of EDI.



Legislative action may be useful and necessary. But the wrong kind of action could be devastating. And I must underscore the seriousness of my last statement. If we are going to be the world leader that we are capable of becoming in health care infrastructure technology, we must be deliberative in the achievement of that goal.

3. Standards

Agreement to a common standard for electronic data interchange is requisite for computers to transmit information. Do we have a common standard for electronic data interchange? We are approaching one rapidly.

WHAT ARE THE POSSIBILITIES BEYOND EDI?

The immediate goals are to decrease administrative costs and to lessen the hassle factor in our health care system today. By agreeing to common standards for payments, enrollments, claims standards, and clinical data, we set into motion a health care infrastructure technology that will be driven by private market forces. In short order, vendors will take this technology and adapt it for use for the interested constituencies identified in Chart 3 -- consumers, providers and payers.

I would like to briefly put on my visionary hat for a moment and look beyond the EDI system being proposed. I see almost unlimited possibilities in its use. Foremost in my mind is improved health care.

All medical knowledge will reside on semi-conductor memory by the end of the decade. I do not mean on a large mainframe or a large data storage device. I mean in the memory of a personal computer.

Personal computers will be essential for consumers to manage their health and wellness programs. The human genome project headed up by James Watson will produce incredible amounts of valuable information about the 3 billion pairs of chemical bases that make up the spiraling DNA inside the nucleus of our cells.

Providers can retrieve the best and latest information on cost-effective treatment protocols. At their finger tips they will have access to a complete accounting of their patients medical histories.

Patients will not run the risk of repeating a lifetime medical history when encountering a new provider.

As the most medically-advanced country in the world, we will be open new international markets with our health care infrastructure technology. Synergistically using our microcomputer and supercomputer technology, along with our food, bio-medical and medical technologies, we will maintain a world leadership position and become a major exporter of health care infrastructure technology.

VIII. Conclusion

- \* The technology is here. The systems expertise, computers and networks are in place nationwide. Our job is to agree on and implement the means to use the

health care delivery system in a coordinated fashion. The WEDI will release its recommendations this summer.

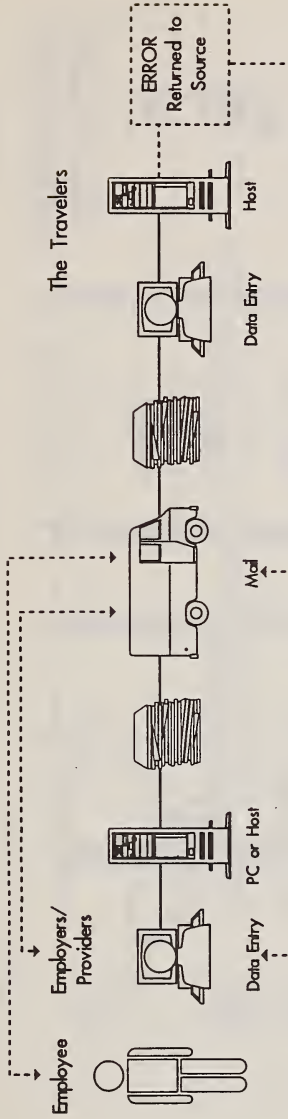
The system should be in place by 1994.

- \* We need to agree to a standard. ANSI standards are recognized worldwide. The WEDI is looking to the ANSI standards as part of its consensus process.
- \* The payoff for the American public includes less hassle, ease of administration, greater security, greater privacy, reduced fraud, faster and more accurate payments, and lower cost for the delivery of health care. Providers will have access to better information, which will enable them to provide better health care.
- \* No other country has the capacity to put together a health care infrastructure technology. The USA can become a world leader and exporter of this technology.
- \* It is important that the Congress resist the impulse to legislate prematurely. The WEDI process is a unique public/private partnership that is working toward a consensus. Legislation may eventually serve a useful purpose, but for now it may derail a very promising process.

I thank you for the opportunity to appear before you this morning. I'd be glad to take any questions you may have.

Chart 1

The Goal Is To Move From THIS:



OR

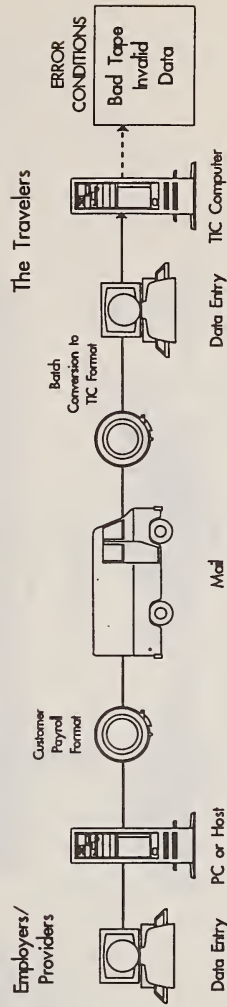
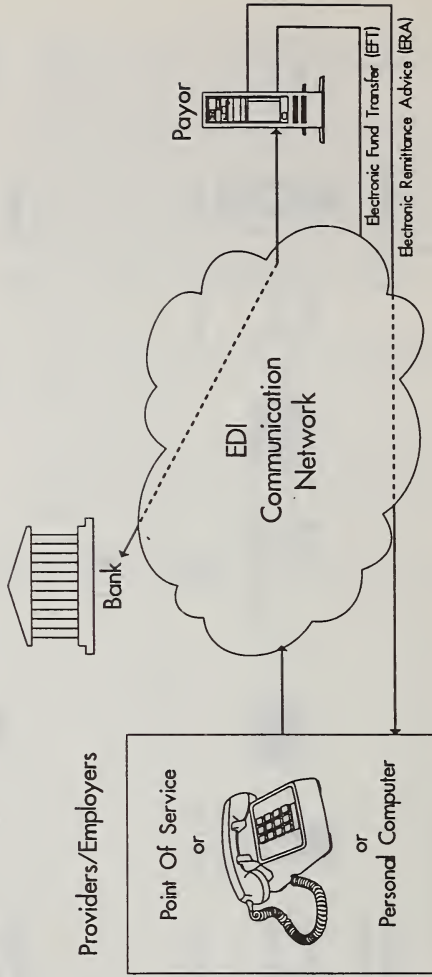


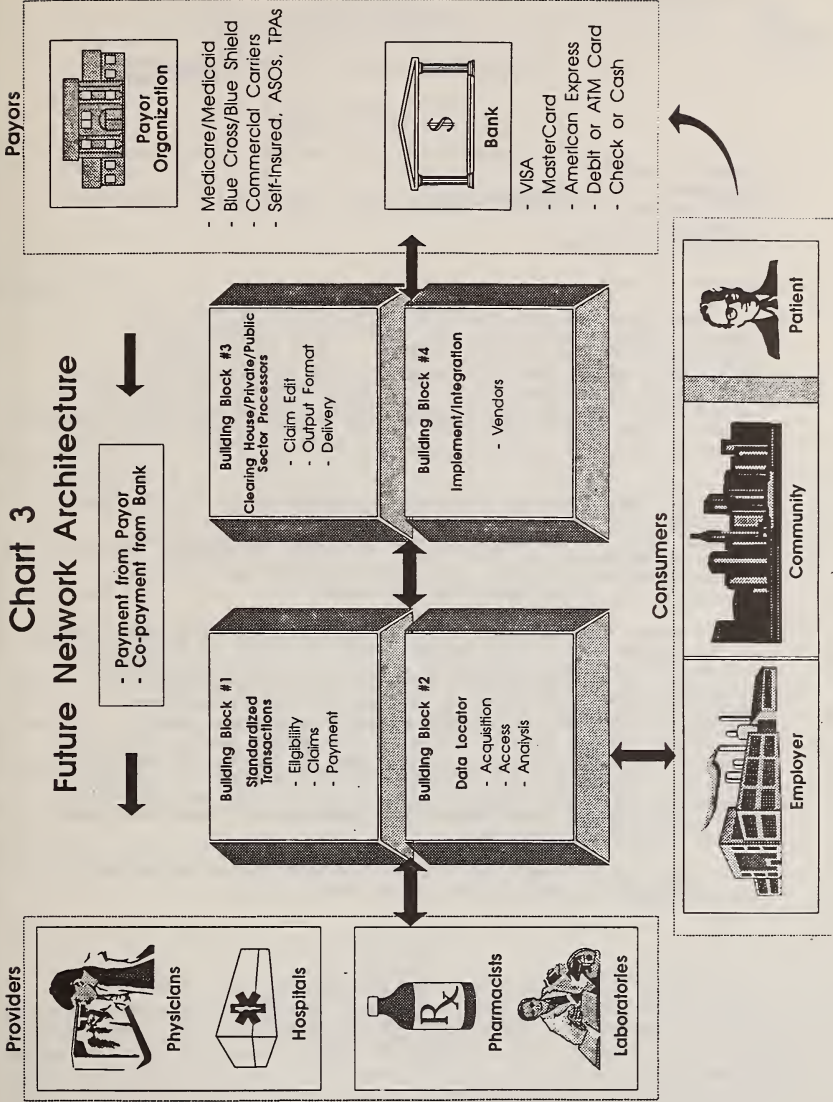


Chart 2  
TO THIS



# Chart 3

## Future Network Architecture





FROM: THE TRAVELERS D.C.  
DEPARTMENT OF HEALTH & HUMAN SERVICES

TO: 243 324 0700

PER 474 1036

The Administrator  
Washington, D.C. 20201

January 13, 1992

Joseph T. Brophy  
President  
The Travelers Insurance Company  
1 Tower Square  
Hartford, CT 06183

Dear Mr. Brophy:

Thank you for meeting with me on Monday, January 13th regarding the progress you have made with the Workgroup on Electronic Data Interchange (WEDI). I want to take this opportunity to express my support for the mission of the Workgroup. It is clear to me that government and the private sector must cooperate if we are to reduce the administrative burden of our health care system. The effort you are making with the Workgroup is a true reflection of this necessary cooperation.

I am anxious to do our part for this effort. I am therefore accepting your offer to name a HCFA representative to the WEDI Steering Committee and am suggesting that our Associate Administrator for Operations, Louis B. Hays, serve in that capacity. Although his participation will be limited to non-voting "observer" status, I am confident that Lou will be a welcome voice on the Steering Committee.

I would also like to reiterate a position that I made clear at the Secretary's Forum on Administrative Costs in November. The Health Care Financing Administration is fully committed to participating in the ongoing effort by the American National Standards Institute (ANSI) to develop a standard electronic billing format. Once the ANSI effort develops a standard electronic format that is useful to the entire health insurance industry we will move, as will the rest of the health insurance industry, to migrate our systems to that standard. It is my impression that the combined efforts of ANSI and your Workgroup will serve to speed the industry's movement to a more efficient administrative environment.

Once again, thank you for your efforts on the Workgroup. I look forward to reading your final plan in July.

Sincerely,

Gail R. Wilensky, Ph.D.  
Administrator



THE COMING REVOLUTION IN  
MEDICAL MANAGEMENT INFORMATION TECHNOLOGY

by Joseph T. Brophy, FSA

President, Travelers Insurance Company

submission to the Robert Wood Johnson Foundation

Summary

Managed care is one of the insurance industry's primary responses to the current health care crisis. Managed care holds promise for expanding access to health insurance to more Americans as well as providing security to those who are afraid of losing the insurance they now have.

There is growing evidence that managed care is effective, both from our experience at The Travelers and studies reported by the Health Insurance Association of America<sup>1</sup>. In the coming months, however, insurers, on behalf of their clients -- employers and employees -- will face growing pressure from consumers and government to take even more decisive steps to contain costs, reduce

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<sup>1</sup>P. Feldstein, et al, "Private Cost Containment: The Effects of Utilization Review Programs on Health Care Use and Expenditures," New England Journal of Medicine (May 19, 1988), 1310-1314, showed utilization review reduced admissions by 12.3 percent, inpatient days by 8.0 percent, hospital expenditures by 11.9 percent and total medical care expenditures by 8.3 percent. Also, Hilmann, et al "How Do Financial Incentives Affect Physicians' Clinical Decisions and Financial Performance of Health Maintenance Organizations?" New England Journal of Medicine, (July 13, 1988)

administrative costs<sup>2</sup>, lessen the "hassle factor" and enhance the efficacy of health delivery.

Travelers believes that the future success of its managed care efforts, indeed the future of affordable health care in general, is harnessing the information management systems already in place and getting that information to those who need it most.

It is our view that information technology and access to information will be the diagnostic tool of the third millennium as the microscope was to the second. In a sense, availability of information serves to empower each participant and brings the medical community to the forefront of effective use of information technologies. The medical "cottage industry" can become a fully information-driven sector of the economy, able to provide significantly higher-quality care at reduced cost.

User-friendly information technology is available today to make a quantum leap forward to improve health delivery. Furthermore, according to Dr. Carver Mead of The California

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<sup>2</sup> On November 5, 1991, Dr. Louis Sullivan, Secretary of the U.S. Department of Health and Human Services, convened a forum on administrative costs. Representatives of insurance companies, government, providers and business attended. Among the successful outcomes of the meeting was an agreement by all parties to use the American National Standards Institute (ANSI) standards, thereby ensuring a common language for communications and the establishment of two work groups -- Electronic Media Claims and Standardized Billing, and Computerized Patient Medical Records. The author is co-chairing the work group on Electronic Media Claims with Bernard Tresnowski, president of the Blue Cross and Blue Shield Association of America.

Institute of Technology, we can anticipate a 10,000-fold improvement in technology performance in the coming decade<sup>3</sup>. Regrettably, information technology is under-utilized today on an industry-wide basis, but this status will change rapidly. The huge increase in information technology performance will change the ground rules.

As a first step in improving the use of information technology, a work group on electronic data interchange was convened in late 1991 by U. S. Health and Human Services Secretary Louis Sullivan. The work group -- co-chaired by the author, with representation from various insurance, business and health organizations -- is focusing its efforts on developing common standards, formats and usage protocols for a variety of vital health administration functions. Through the use of existing technologies, a coordinated administrative system can be used at every level of the health care industry, from individual doctors' offices to the largest health insurers.

The players who want to compete have no choice but to build partnerships to move technology out of the back office and direct it to the point of service. By developing appropriate databases and information delivery systems, insurers, health care providers, employers and patients will

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<sup>3</sup>G. Gilder, "You Ain't Seen Nothing Yet," Forbes (April 4, 1988), 89-93.



be able to make health care decisions based on all relevant information available, at the point of service delivery.

The quality of health care delivery will improve as more information is available, while costs and hassle will be reduced. The linkage between the cost and quality of health care is paramount to reducing the skyrocketing increases in health care costs.

### Introduction

Until recently, the insurance industry provided mainly traditional indemnity coverage. A customer submitted a claim, the insurer paid it according to the employer's benefit plan, audit controls were exercised and few, if any, other questions were asked. This system worked for many years. Measured on timeliness, accuracy and courtesy, most insurers were very good at indemnity coverage, and most customers liked it.

Nevertheless, as health care costs continued to spiral upward -- and exacerbated by the fact that more and more of these costs were being shifted to the private sector -- it became clear that the insurance industry needed to take another approach to providing coverage. That meant moving from managed benefits to managed care.

It is no secret that most insurers regard managed care as the future of health coverage. Managed care, in this

context, can be defined as a value-added, disciplined program by insurers, employers and providers to provide employees with the highest quality health care at the most cost-effective price. Cost and quality are irrevocably bound together.

#### Current state-of-the-art managed care

Today's managed health care requires that insurers constantly monitor and rigorously analyze, retrospectively and concurrently, review techniques and medical management practices for day-to-day operating decisions. The review and management processes that have been developed have been successful in meeting day-to-day needs. At the same time, however, review and management systems are criticized as intrusive and have added an extra level of management to the health care process. Bills were previously paid by employers based solely on providers' treatment. Now, insurers review treatment before and after care is delivered on behalf of their clients. However, these reviews are not done for purposes of value-added strategic planning and decision-making.

The Travelers was a relative latecomer to managed care, not developing a comprehensive plan until 1989. As such, we faced formidable challenges both in developing an effective system and in selling ourselves to our existing and new customers. As tough as this challenge was, we were firmly

convinced from day one that we would become a major innovator in the field. The reason comes down to two simple words: information management.

#### The role of information technology

Health care is an information business. Indeed, the essence of managed care is information. The more relevant the information available to each participant in the health care delivery system, the more likely that physicians and hospitals will be able to provide the right treatment and the right service at the right time. As a result, the care will be of higher quality and less expensive.

While, in general, few will deny that the United States has the best physicians, hospitals and medical technology in the world, the provision of medical care remains one of the great "cottage industries" in our nation from an information management perspective. Even the largest hospitals in the country hardly employ more than a few thousand people. Many physicians practice alone or with a few partners.

The missing ingredient in this huge system has been a virtual lack of integration of information. This exists despite the superior nationwide technology infrastructure that is accessible to most, but is under-utilized. In all but a few cases, hospitals, physicians, laboratories and other providers operate with a paper-based medical record with virtually no clinical database, with minimal use of



advanced information technologies and minimal coordination<sup>4</sup>.

At the same time, the amount of medical information available is growing exponentially. Estimates are that the amount of information in the world doubles every 20 months<sup>5</sup>; a projection that undoubtedly underestimates the faster growth in health care-related information.

### Information explosion

Given the enormous volume of raw data that is constantly being accumulated, an integrated, advanced information system would enable advances in diagnoses and treatments to be rapidly and effectively disseminated to all users.

The combination of the information explosion and the lack of integration of this information places those responsible for providing care, and those paying for it, at a significant disadvantage. This may help to explain, for example, why doctors in one community perform five times the

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<sup>4</sup>J. G. Kaplan, M.D., M.P.S., J. Wise, Ph.D. and R. H. Gay, M.S., "Towards Effectiveness -- Part II: Advanced Techniques in Treatment Management," Medical Interface (July 1991). Also, J. G. Kaplan, M.D., "The Single Pathway Toward Effectiveness," Medical Interface (October 1990).

<sup>5</sup>W. J. Frawley, G. Piatetsky-Shapiro and C. J. Matheus, "Knowledge in Databases -- An Overview," Knowledge Discovery in Databases, G. Piatetsky-Shapiro and W. Frawley, eds. (MIT Press, 1991).

number of back and neck surgeries per capita than those in another for no apparent clinical reason<sup>6</sup>.

### Health care costs

The sophisticated American health care system has also resulted in enormous increases in cost. National health expenditures have increased at twice the rate of general price inflation for nearly the last 10 years. With medical expenses at almost \$662 billion in 1990 and estimated at \$738 billion in 1991, the United States now spends 12.4 percent of its gross national product on health care<sup>7</sup>.

It should also be noted that 80 percent of all health care costs have been traced to physicians' decisions<sup>8</sup>. In effect, most medical costs are not a result of expensive tests such as CAT-scans, but are due to a physician's ball-point pen. Increasing costs are passed on to insurers, who in turn, pass them on to customers.

Health care is, and will continue to be, a local business. Patients, providers and employers all expect

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<sup>6</sup> P. Caper, "Population-Based Measures of the Quality of Medical Care," Health Care Quality Management for the 21st Century, J. Couch, M.D., J.D., ed., (Venice, Florida, American College of Medical Quality, 1991).

<sup>7</sup> Issue Brief, (Employee Benefit Research Institute, September 1991).

<sup>8</sup> G. A. Wilensky, Ph.D., and L. F. Rossiter, "Relative Importance of Physician-Induced Demand for Medical Care," Milbank Memorial Fund Q, 1983; 661: 252-77.

services that are consistent with local customs and practices. No matter what steps are taken to develop large-scale solutions to the health care problems facing America, this local component must always be considered.

Nonetheless, the health system clearly needs reform. Managed care is the industry's response to this need, and employers are buying in -- roughly 40 percent of Travelers' new employee benefits business is managed health care.

And managed care is working. In mental health and substance abuse, for example, cost increases have been much greater than those in general medical care. That these costs can be controlled is being demonstrated at U.S. Behavioral Health, one of The Travelers' companies. Through a managed care system in which the collection, analysis and communication of information are essential components, psychiatric and substance abuse costs are not only being controlled, but in many cases being reduced substantially<sup>9</sup>.

#### Information-based systems

An information-based health care system requires large, comprehensive databases using universally accepted standards of information<sup>10</sup>, accessible by personal computers at the

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<sup>9</sup> S. Feldman, ed., Managed Mental Health Services, Charles C. Thomas, Publisher, Springfield, Illinois, (January, 1992).

<sup>10</sup> Such standards are the basis for the work being conducted by the work group on electronic data interchange. Details of this project are contained in the following text.



actual point of service<sup>11</sup>. Users -- whether they be physicians, employers or patients -- will have the ability to access the body of knowledge relevant to the condition under treatment at the time of treatment. In all instances, access to confidential patient information must be on an authorized basis to ensure privacy.

#### The Work Group on Electronic Data Interchange

A major step in developing and implementing an information-based system was the establishment of a work group on electronic data interchange. The work group was convened in late 1991 by U.S. Health and Human Services Secretary Louis Sullivan to develop common standards, formats and usage guidelines for a variety of key health administrative functions. The work group co-chaired by the author and Bernard Tresnowski, President of the Blue Cross and Blue Shield Association, has as members representatives from various insurance, business and health organizations.

The work group on electronic data interchange is focused on bringing the administration of health care into the information age. By using existing technologies a host of vital health administration functions can be brought

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<sup>11</sup> N. Alvaro, P. Auyer, J. G. Kaplan, M.D., "An Argument for a Point-of-Contact Data Management System," Medical Interface, (February 1989).

under a common set of guidelines and used at every level of the health care industry, from individual doctors' offices to the largest health insurers.

The group is specifically seeking to develop common formats and standards for member eligibility, benefit coverage descriptions, billing at the line level, claim payment and clinical and utilization review data.

Such electronic transactions, right at the point of service, will replace existing cumbersome procedures that require the use of extensive paperwork, multiple phone calls and lengthy processing delays. The electronic system will be more secure, result in considerably less confusion and frustration for all participants and will result in immediate savings.

The proposed electronic administrative system will have two main features--a primary system that maintains centralized information on eligibility, claims, benefits and other administrative items, and a mechanism that enables individual patient data to be automatically entered into the primary system. Each insurer will maintain its own primary system, but by using common data formats and standards, providers will be able to easily move from one system to another.

The mechanism that will be developed for use in entering individual patient data will be a magnetic card. The card, similar in appearance to a credit card, will contain all of the information needed to handle automatic

billing, eligibility verification and other financial and administrative details. A health care provider will simply run the card through a magnetic reader and all of the relevant patient information will be input into the primary system--everything from a patient's health history, to their date of birth.

By using the magnetic card, a provider will only be required to enter information concerning a patient's treatment -- such as a diagnosis based on standardized codes and formats, treatment and financial data. The system will automatically process the claim and enter the information on the patient's magnetic card.

The cardswipe system will benefit all users of the process. Providers, patients and insurers will have quick access to eligibility, immediate authorization approval, improved communications, reduced operating costs and improved claims processing with no forms, fewer errors and quicker turnaround.

The magnetic card can be viewed as just the first step in the process of electronically linking of entire health care delivery and administration system. The next step in the process, is electronic data interchange (EDI) -- establishing electronic linkages between providers and insurers/administrators to instantaneously verify eligibility, process claims and determine benefits. Such a system, again, using today's technology, will enable providers to immediately determine which courses of

treatment are covered and whether individual patients are eligible for covered treatment.

#### Informed Decision-Making

Far from being an ultimate system, however, the electronic health care administration process described above is only a first step. With the EDI systems in place, the framework for a true information-based system will be established.

Fundamental to the development of such a system is the assumption that providers, patients and employers will make the right decisions given the right information. By assuming that correct decisions will be made, this "honor system" will eliminate much of the medical micro-management that insurers currently practice. Furthermore, the information system will permit comparisons between the delivered care and those practice patterns demonstrably associated with superior risk-adjusted outcomes.

In developing an information-based system, a variety of concerns must be addressed. Foremost, as with the development of any product or system, there must be an understanding of what the customer needs and wants. In this case, customers include providers, patients, employers, regulators, insurers themselves and other external parties.

The marketplace will, in effect, design the system's architecture and support. All system design and



implementation decisions must be based on a thorough analysis of market needs and preferences. In order to compete, the system must become the primary source of critical management information to each participant in the process. Providers will have the ability to make better decisions, with better outcomes and lower costs; patients will be more informed consumers of health care; and employers will serve as more effective financial and quality managers of the system.

The system must allow for constant communication among all participants. Such communication would enable the system to constantly improve, to "learn" what solutions are most appropriate to specific problems.

Learning will be accomplished through several steps:

1. By translating data into useful information;
2. By developing an "exchange relationship" with providers -- determining what they want and need, then providing the mechanism to provide these wants and needs. The process will provide solutions by understanding and promoting what provider practices are effective.
3. The system will promote working together to improve the knowledge base. Information will be seen as shareable. By developing such synergisms, communications will be improved. Participants will know what is and is not available.

4. The system will form a collective database and improve confidence in theories and conclusions.
5. The system will provide data about efficacy, efficiency, cost-effectiveness and value.

#### System requirements

The system must make the database user-friendly so people who are authorized can use it easily to obtain the required information, not only retrospectively and concurrently, but prospectively as well. Thus, the system will require the development of methods to gather, edit and continuously update and monitor data, and a way to deliver it, at the time of service, to all authorized users.

The development of the system will require extensive strategic alliances between insurers, providers, employers, patients, brokers and agents. The alliances will be based on the common purpose of maintaining or improving the health of patients. Alliances will be required to achieve the following:

- Clarification of expectations and limitations;
- Access to relevant data;
- Incorporation of databases and reference materials that provide the necessary facts;
- Agreement on data needs and definitions;

- Translation of data into useful information through various techniques, including sorting and accessing at various levels of detail;
- Development of user guidelines;
- Agreements on payments and standards;
- Agreements on marketing the primary and supporting systems;
- Severity-adjusted outcomes research;
- Prospective planning and statistical modeling.

A knowledge-based system will provide the health care delivery system with unprecedented opportunities. For example, it is conceivable that the health care system could evolve from managed care to case management and eventually even to health management. That is, an evolution from today's system of treating illness to one that fosters wellness.

Companies in other industries are already using knowledge-based systems to perform such "database mining." For example, American Airlines uses its frequent flyer database to identify its best customers for special promotions. General Motors is using a database of automobile trouble reports to build diagnostic expert systems for various models<sup>12</sup>. Failing to develop and use a

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<sup>12</sup> W. J. Frawley, et al.

similar medical knowledge-based system severely limits the advances that can be made in medical research and treatment.

### Conclusion

There is little doubt that the capability currently exists to build user-friendly databases that provide precise, confidential information on how patients' conditions were diagnosed and treated, what every provider did along the way and what the outcomes were. The final step will be to build a system that will give providers, patients and employers the ability to use the huge volume of experience in the database to assist them in making health care decisions based on all information available at the point of service.

Could an information-based system deliver on these promises? If past experience is any guide, the answer is a resounding yes. According to the American Society for Quality Control, other industries that have applied advanced information technologies to their products and services have realized annual savings of as much as 40 percent<sup>13</sup>. Applied to 1991 estimated health care expenditures of \$738 billion, that equates to an annual savings of almost \$300 billion.

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<sup>13</sup> "On a Silver Platter," American Society for Quality Management (Milwaukee, WI, 1986).



Whether or not that ideal is achievable is not particularly important. Given the magnitude of national health care expenditures<sup>14</sup> -- and the efficiencies that would result from a knowledge-based information system, the potential savings will be enormous. Even more significant, however, the improvements in diagnostic and treatment capabilities will bring about a tremendous increase in the overall quality of care provided and in medical outcomes.

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<sup>14</sup> Health care expenditures in 2001 are projected at \$2 trillion using today's rate of annual increase, according to a 1991 estimate of the United States Office of Management and Budget.

## MANAGING MEDICAL INFORMATION

Joseph T. Brophy

**M**ANAGED CARE IS ONE OF THE insurance industry's primary responses to the current health care crisis. Managed care holds promise for expanding access to health insurance to more Americans, as well as providing security to those who are afraid of losing the insurance they now have.

There is growing evidence that managed care is effective. A study by the Health Insurance Association of America showed that utilization review reduced hospital admissions by 12.3 percent, inpatient days by 8 percent, hospital expenditures by 11.9 percent, and total medical care expenditures by 8.3 percent. In the coming months, however, insurers will face growing pressure from their consumers and the government to take even more decisive steps to contain costs, reduce administrative costs, lessen the "hassle factor," and enhance the efficacy of health delivery.

The future success of managed-care efforts, indeed the future of affordable health care in general, lies in harnessing the information management systems already in place and getting that information to those who need it most.

Information technology and access to information will be the diagnostic tools of the third millennium, just as the microscope was to the second. In a sense, the availability of information empowers each participant and brings the medical community to the forefront of effective use of information technologies. The medical "cottage industry" can become a fully information-driven sector of the economy, able to provide significantly higher-quality care at reduced cost.

User-friendly information technology is available today to make a quantum leap forward to improve health delivery. Furthermore, according to Dr. Carver Mead of the

California Institute of Technology, the United States can anticipate a 10,000-fold improvement in technology performance in the coming decade. Regrettably, information technology is underutilized today on an industrywide basis, but this status will change rapidly. The huge increase in information technology performance will change the ground rules.

The players who want to compete have no choice but to build partnerships to move technology out of the back office and direct it to the point of service. By developing appropriate databases and information delivery systems, insurers, health care providers, employers, and patients will be able to make health care decisions based on all relevant information available at the point of service.

The quality of health care delivery will improve as more information is available, while costs and hassle will be reduced. The link between cost and quality of health care is paramount to reducing the skyrocketing increases in health care costs.

Until recently, the insurance industry provided mainly traditional indemnity coverage. A customer submitted a claim, the insurer paid it according to the employer's benefit plan, audit controls were exercised, and few, if any, other questions were asked. This system worked for many years. Measured on timeliness, accuracy, and courtesy, most insurers were good at indemnity coverage, and most customers were pleased.

Nevertheless, as health care costs continued to spiral upward—and were exacerbated by the fact that more and more of these costs were being shifted to the private sector—it became clear that the insurance industry needed to take another approach to providing coverage. That meant moving from managed benefits to managed care.

JOSEPH T. BROPHY is president, Managed Care, Employee Benefits, and International Operations of the Travelers Insurance Company in Hartford, Connecticut.

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It is no secret that most insurers regard managed care as the future of health coverage. Managed care, in this context, can be defined as a value-added, disciplined program by insurers, employers, and providers to furnish employees with the highest-quality health care at the most cost-effective price. Cost and quality are irrevocably bound together.

### STATE-OF-THE-ART MANAGED CARE

Today's managed health care requires that insurers constantly monitor and rigorously analyze review techniques and medical management practices for day-to-day operating decisions. The review and management processes that have been developed have been successful in meeting day-to-day needs. At the same time, however, these systems are criticized as intrusive and have added an extra level of management to the health care process. Bills were previously paid by employers based solely on providers' treatment. Now, insurers review treatment before and after care is delivered on behalf of their clients. However, these reviews are not done for purposes of value-added strategic planning and decision making.

### THE ROLE OF INFORMATION TECHNOLOGY

Health care is an information business. Indeed, the essence of managed care is information. The more relevant the information available to each participant in the health care delivery system, the more likely that physicians and hospitals will be able to provide the right treatment and the right service at the right time. As a result, the care will be less expensive and of higher quality.

While, in general, few will deny that the United States has the best physicians, hospitals, and medical technology in the world, the provision of medical care remains one of the great U.S. cottage industries from an information management perspective. Even the largest hospitals in the United States hardly employ more than a few thousand people. Many physicians practice alone or with a few partners.

The overriding problem in this huge system has been a virtual lack of integration of information. This exists despite the superior nationwide technology infrastructure that is accessible to most but underutilized. In all

but a few cases, hospitals, physicians, laboratories, and other providers operate with a paper-based medical record with virtually no clinical database, minimal use of advanced information technologies, and minimal coordination. At the same time, the amount of medical information available is growing exponentially. Estimates are that the amount of information in the world doubles every twenty months, a projection that undoubtedly underestimates the faster growth in health care-related information.

### INFORMATION EXPLOSION

Given the enormous volume of raw data that is constantly being accumulated, an integrated, advanced information system would enable advances in diagnoses and treatments to be rapidly and effectively disseminated to all users.

The combination of the information explosion and the lack of integration of this information places those responsible for providing care, and those paying for it, at a significant disadvantage. This may help to explain, for example, why doctors in one community perform five times the number of back and neck surgeries per capita than those in another for no apparent clinical reason.

The sophisticated U.S. health care system has also resulted in enormous increases in cost. National health expenditures have increased at twice the rate of general price inflation for nearly the last ten years. With medical expenses at almost \$662 billion in 1990 and estimated at \$738 billion in 1991, the United States now spends 12.4 percent of its gross national product on health care.

It should also be noted that 80 percent of all health care costs have been traced to physicians' decisions. In effect, most medical costs are not a result of expensive tests such as computerized axial tomography scans, but are due to a physician's ballpoint pen. Increasing costs are passed on to insurers, who in turn pass them on to customers.

Health care is, and will continue to be, a local business. Patients, providers, and employers all expect services that are consistent with local customs and practices. No matter what steps are taken to develop large-scale solutions to the health care problems facing the United States, this local component must always be considered.

Nonetheless, the health system clearly needs reform. Managed care is the industry's

response to this need, and employers are buying in—roughly 40 percent of Travelers' new employee benefits business is managed health care.

### INFORMATION-BASED SYSTEMS

An information-based health care system requires large, comprehensive databases using universally accepted standards of information, accessible by personal computers at the actual point of service. (At a November 5, 1991, meeting hosted by the Department of Health and Human Services, the insurance industry, the Blue Cross/Blue Shield Association, the Health Care Financing Administration, and other affiliated organizations agreed to develop communications standards to reduce administrative costs.) Users—whether they be physicians, employers, or patients—will have access to the body of knowledge relevant to the condition at the time of treatment. In all instances, access to confidential patient information must be on an authorized basis to ensure privacy.

Fundamental to the development of such a system is the assumption that providers, patients, and employers will make the right decisions given the right information. By assuming that correct decisions will be made, this "honor system" will eliminate much of the medical micromanagement that insurers currently practice.

In developing an information-based system, a variety of concerns must be addressed. Foremost, as with the development of any product or system, there must be an understanding of what the customer needs and wants. In this case, customers include providers, patients, employers, regulators, insurers themselves, and other external parties.

The marketplace will, in effect, design the system's architecture and support. All system design and implementation decisions must be based on a thorough analysis of market needs and preferences. To compete, the system must become the primary source of critical management information to each participant in the process. Providers will have the ability to make better decisions, with better outcomes and lower costs; patients will be more informed consumers of health care; and employers will serve as more effective financial and quality managers of the system.

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Learning will be accomplished through several steps:

1. By translating data into useful information.
2. By developing an "exchange relationship" with providers—determining what they want and need and then providing the mechanism to fulfill these wants and needs. The process will provide solutions by understanding and promoting what provider practices are effective.
3. By promoting working together to improve the knowledge base. Information will be seen as sharable. By developing such synergisms, communications will be improved. Participants will know what is and is not available.
4. By forming a collective database and improving confidence in theories and conclusions.
5. By providing data about efficacy, efficiency, cost effectiveness, and value.

#### SYSTEM REQUIREMENTS

The system must make the database user friendly so people who are authorized can use it easily to obtain the required information, not only retrospectively and concurrently but prospectively as well. Thus, the system will require the development of methods to gather, edit, and continuously update and monitor data and a way to deliver it, at the time of service, to all authorized users.

The development of the system will require extensive strategic alliances between insurers, providers, employers, patients, brokers, and agents. The alliances will be based on the common purpose of maintaining or improving the health of patients. Alliances will be required to achieve the following:

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A knowledge-based system will provide the health care delivery system with unprecedented opportunities. For example, it is conceivable that the health care system could evolve from managed care to case management and eventually even to health management—that is, an evolution from today's system of treating illness to one that fosters wellness.

Companies in other industries are already using knowledge-based systems to perform such "database mining." For example, American Airlines uses its frequent flyer database to identify its best customers for special promotions. General Motors is using a database of automobile trouble reports to build diagnostic expert systems for various models. Failing to develop and use a similar medical knowledge-based system severely limits the advances that can be made in medical research and treatment.

#### BETTER CARE AT REDUCED COST

There is little doubt that the capability currently exists to build user-friendly databases that provide precise, confidential information on how patients' conditions were diagnosed and treated, what every provider did along the way, and what the outcomes were. The final step will be to build a system that gives providers, patients, and employers the ability to use the huge volume of experience in the database to assist in making health care decisions based on all information available at the point of service.

Could an information-based system deliver on these promises? If past experience is any guide, the answer is a resounding yes. According to the American Society for Quality Control, other industries that have applied advanced information technologies to their products and services have realized annual savings of as much as 40 percent. Applied to 1991 estimated health care expenditures of \$738 billion, that equates to an annual savings of almost \$300 billion.

Whether or not that ideal is achievable, the potential savings from increased efficiency will be enormous. Even more significant, however, the improvements in diagnostic and treatment capabilities will bring about a tremendous increase in the overall quality of care provided and in medical outcomes. ■

Chairman STARK. Mr. Gradison.

Mr. GRADISON. I have no questions, Mr. Chairman. I am too overwhelmed to ask anything.

Chairman STARK. All right. I appreciate your testimony and, Mr. Brophy, I am impressed. Mr. Tresnowski, I am always impressed with your knowledge of this.

I finally got a list of what I was asking the gentleman from HCFA earlier. It concerns me about a road that we are going down. I cannot really think of much role for Congress to play here, except that somebody, at some point, with the Blues, for-profit insurance companies, with State Medicaid programs, Federal Medicare—somebody is going to have to finally pick a system.

I mean, there will be several systems, and I am sure that they will all be good—maybe they are all equal. And somebody is just finally going to have to say, "Well, let's do this one."

I suspect that that will be about the sum total of the Government role. Hopefully, we will pick the right one.

But there is a shared system arrangement in progress now, and I was referring to this before. There are six systems, most of which are operated—if not all—by Blue Cross. And here is what troubles me.

The California system uses a Florida-shared system, and it is my understanding that last year, California was put onto this new system and without running parallel, which in my experience with converting to data processing, is not a very smart thing to do. But they did not run parallel. They dropped the old system and went into the new system.

HCFA was 9 months behind in paying—or the contractor in California was 9 months behind in paying. The system was not working. So they finally just started to pay the claims directly, and they are going to have to go back and audit and make sure the hospitals were submitting the proper claims.

Now, that system is different from the Arkansas system, and it is different from the public domain Pittsburgh and western Maryland. And that is just for part A. We have a bunch of different systems for part B.

Is this not somehow unnecessarily complex? Why would we not be better served to pick one system, or at least get to that?

Mr. BROPHY. Sir, the issue is not whether the systems were the same or not. If the systems were the same and they did not go through a proper test, they would have run into the same problem.

The issue, here, is they did not have a proper fallback plan.

Chairman STARK. Well, I understand that, but let us assume for a minute that there are different data bases, and different protocols, and these systems cannot communicate with each other.

Mr. BROPHY. It does not make any difference whether they were different or not. They should have gone through a test plan to—

Chairman STARK. I understand that.

Mr. BROPHY [continuing]. And run parallel.

Chairman STARK. I understand that. That is what I agreed. But, then, I find that these systems are each unique. They use a different protocol, they use different data bases, so that they cannot necessarily communicate with one another, and, I guess, my question is if we start developing a series of systems—and I do not care

whether it is the voluntary standards bureau. What did you call it, Barney?

Mr. TRESNOWSKI. ANSI.

Chairman STARK. Yes. It makes no difference to me. I am just saying, shouldn't we have everybody who uses these systems agree on broad protocols and design of data base and transmission requirements as soon as we can, then everybody can proceed.

Mr. TRESNOWSKI. Now, let me draw a distinction between a processing system, which is what you have described between California, Florida, Arkansas—that is a nightmare, and we have known it for a long time.

My problem is, I have been around this business so long that I remember back when I tried to convince the old Bureau of Health Insurance—you remember those days—

Chairman STARK. Yes.

Mr. TRESNOWSKI [continuing]. To develop a model Medicare processing system, and I came within a smidgen of getting that accomplished. We never did, though.

But it does not take a genius to think that would make a lot of sense.

But, let me put that aside and talk about what Mr. Brophy and I have been working on, and that is the development of uniform standards and data sets that would be used for the transmission of data from the provider to the payer, and for remittance advices back. And that is the area that we are going to make the greatest progress on.

Our expectation is that these ANSI standards will be finished by the end of this year. What our work group hopes to accomplish is to be able to set in motion, for the entire industry—whether it is Blue Cross and Blue Shield organization or the commercial carriers—total commitment to the use of those ANSI standards in the transmission of data.

You do not have to define the architecture of the system at that point. All you have to do is say to everybody, "You're all going to operate under these same set of standards," and whether Blue Cross has a terminal in a hospital, that terminal will be used to transmit Blue Cross data, Travelers Insurance data, whatever it happens to be, and they will use a switching device in order to switch back and forth to who the payers are.

That process, which, as Joe Brophy just said, is within our hands today. The technology is there. All we have to do is have the will and the commitment to get it done.

I have to tell you, I think that will and commitment is there. I have been very impressed with the work of the group and believe they will be able to accomplish that.

Chairman STARK. Will there not have to ultimately be some discipline, so that you do not end up with a MasterCharge system and a VISA system.

I am thinking back to the problems we had with UB-82. Not everybody got into the act, because nobody said you have to. And then it sort of came close, and then it disintegrated.

Would it not be desirable, whether it is just through mandating a single clearinghouse that should be used so we do not have two



clearinghouses, to say, "This is a system, and Medicare can use it. Blue Cross can use it. Travelers can use it—if they choose."

Then, at least, we will not have the possibility that Travelers decides that HIAA wants their system, the Blues want theirs, Kaiser wants theirs and Medicare wants theirs, and we are back in the soup again.

Mr. TRESNOWSKI. Yes. That, clearly, is a problem, Mr. Stark. It does not make any sense any more for any carrier, Blue Cross or otherwise, to go another way when, in fact, the consumer is expecting these transactions to be essentially transparent to them. And the only way it is going to be transparent is if the entire industry adopts these standards.

Now, you know, you might say to me, "Good luck, and it may not happen. Wouldn't it be nicer to have a Federal law that mandates it?" I do not know.

Chairman STARK. I do not really see that. I see some kind of Federal incentives, if you will, to get the network going, and then let people get into that network—electronic funds transfer from Medicare directly to the provider, it seems to be would be a nice incentive.

Mr. TRESNOWSKI. Absolutely.

Chairman STARK. People could get paid like that. I think that is almost enough inducement. I think if Travelers wanted to join, it might be incumbent on Travelers to make their eligibility standards available to a hospital, so if you came into the hospital and Travelers wanted to participate in the system, you could get an on-line understanding that I had certain benefits available through Travelers, or I did not.

If Travelers chose to do this but, say, an HMO did not choose to do it because they really did not take people from outside and did not want to be bothered with it, fine. Good luck. We will wait for it to be convenient to you.

Mr. TRESNOWSKI. Incentives, obviously, make an awful lot of sense. The biggest thing that has happened here is the recent decision of the Health Care Financing Administration to accept the work of the ANSI group. I will tell you that the power of Medicare to move that situation is so enormous. They will push it, we will all join in, and you will see, by the end of this year, a pretty broad scale application of the standards.

Chairman STARK. What objection would either of you have to using the Social Security numbers?

Mr. TRESNOWSKI. I heard you say that before. It is interesting, about 80 percent of the Blue Cross plans use Social Security numbers as their identifier on their subscribers.

Chairman STARK. Does that trouble you, Mr. Brophy?

Mr. BROPHY. No. No, sir.

Chairman STARK. If we did not use it, it might prejudice my health care reform plan, and I do not want to prejudice Nancy Johnson's plan, so if she wins, her plan should be able to use the administrative system. But if we are going to simplify the poverty side of this issue, using the Social Security number could help in New York. The Social Security number ties us to income information, and the only income information we have in this country is through the Internal Revenue System.



They are going to have to participate in this whether they like it or not later, if we are going to determine if people are entitled to some Federal assistance because of their income-levels. We might as well get it all in there. And we are going to have to assure privacy, as we do now with income tax data. It just seems to me that we would be blocking ourselves out of some real simplification and some useful data if we did not use the Social Security number. And I am happy to hear you say that you don't disagree.

Mrs. JOHNSON.

Mrs. JOHNSON. Thank you very much.

I just want to clarify something that you went through with the chairman earlier. I am probably the least sophisticated here on computer issues.

But am I correct in concluding from your exchange that uniform processing architecture is not necessary to uniform transmission capability?

Mr. TRESNOWSKI. That is right.

Mrs. JOHNSON. OK, thank you.

Mr. TRESNOWSKI. That is exactly right.

Chairman STARK. But the reverse, if the gentlelady would yield, is true.

Mr. TRESNOWSKI. Yes.

Chairman STARK. In other words, you do not have to have universal forms, but if you did not have a universal data-transmitting system, you could never have any general—

Mr. TRESNOWSKI. If I may, you drew an analogy earlier, Mr. Chairman, between AT&T, MCI, and Sprint. You do not need to designate one of those as the architect of the system, but all of them need to have the uniform standards in order to apply any of those architectures.

Mrs. JOHNSON. I appreciate that. Now in looking at the issue of uniform transmission, I would like to hear your comments on a subject that we discussed a little earlier.

In reviewing the data, what data ought to be transmitted, what are the key issues that you are having to look at?

If, in the past, billings had to be associated, depending on the company's interest with some addendums of what they needed, have you been able to—what are the key issues, the central problems, that you have had to resolve in order to find some bottom line that someone would be willing to live with without adding addendums, which I suppose is what you are trying to do.

Mr. BROPHY. Well, you know, the ANSI standards are based on a flexible transmission standard. Previous standards were based on—they call them flat files—but they were fixed formats. And when you have a fixed format standard, it becomes very difficult to make changes, or to add additional data items.

So the new ANSI standards are a very flexible standard that allows for adding trailers—optional information—so if you want to add additional optional information, you can. So if we get on with moving forward on implementing the ANSI standards, I think some of the difficulties that we have had in the past with collecting additional information, those problems will be minimized.

And we are going to, as a society, need more and more information. And when I mentioned that information is doubling every 20

years, we cannot close in and say: This is all the information I am going to give you. We are going to demand the need for greater detailed information, and the technology is available today to provide that. And I think that as we identify and agree on these standards, which we are very close to doing incidentally, I think this is going to facilitate this process.

And when people begin to realize the simplicity of using these new technologies, I think these types of problems and questions and issues are going to disappear.

Mrs. JOHNSON. And do you think also that sole rural practitioners will be able to move into this new system fairly easily? Will it be user-friendly?

Mr. BROPHY. The basic requirement is, a rural physician needs a telephone. If he has a telephone, he is in the system.

I might add that just recently Travelers, working with HCFA and under the auspices of HCFA, just developed some software that is in the public domain now. It is being mailed out to physicians to allow the solo physician, if he has a personal computer—a \$1,500 personal computer—he can wire into or communicate using the existing EDI standards and submit his bills electronically. So all that technology is available.

Mrs. JOHNSON. Well, I really appreciated your testimony, and it is very exciting to hear the two of you talk with enormous experience in health care and to share, Mr. Brophy, your experience in some other areas that are also terribly relevant to what we are doing. And it is encouraging to hear that so much is possible.

One does know that from other areas of experience in our society, and to see that if we focus and use what we have, that we can move rapidly into the future to solve some of the problems that we have is really encouraging, and in my mind just makes very solid sense.

And I look forward to your moving rapidly enough and the public/private sector in the next year to giving us some of the guidance we need to determine whether we go more in my chairman's direction or more in the direction that I have been interested in, but how we do then resolve the problems that face us.

And I appreciate also your recent release about your one-form electronic health care information system that Travelers has developed.

Mr. BROPHY. Thank you.

Chairman STARK. One final question. I am unsure what role the Government ought to play in this, if any. To take the analogy that we used of MCI and Sprint and long distance lines, we are able to do that because traditionally or historically we had one phone company, long-lines company, and that was pretty much memorialized through the various State utility commissions where you had a lot of local and State control. But then basically you had one long-distance company, and if you had started from scratch with MCI and Sprint and AT&T started all getting going at once, you might not have had the climate in which we could have such easy interchange or interface.

Do either of you have any suggestions as to how we could help this process be orderly and expedite it, or should we just stay out of it?



Mr. BROPHY. Mr. Chairman, thank you.

I would commend to your committee to read the paper by Jeff Sanders, his written testimony that was submitted here. I think it is very visionary; it is very practical; it is leading edge; it is doable. I think the spirit of what is in his paper and what the people at Medicare are doing, I think is phenomenal and will go a long way toward providing us really with the information to improve quality and—

Chairman STARK. Is it necessary? I mean, is it necessary to the plan that you gentlemen envision, that they do cooperate?

Mr. TRESNOWSKI. Absolutely.

Chairman STARK. What?

Mr. TRESNOWSKI. Absolutely it is. And to respond to your question, I think, Mr. Stark, we are going to report in July. That is not that far off.

I have to tell you, I was quite skeptical when Joe and I started this. I am not anymore. I am very enthusiastic about what we are going to be able to do.

See our report. See what happens as a result of that. And if you do not see the industry moving for any reason, then I think you come back and ask your question again, whether the Government ought to use some other prod, incentive, whatever, to get the job done.

Chairman STARK. No, I am not suggesting that—except insofar as you are an intermediary—I would think that the only conceivable thing that we would do is to require Medicare to have a system. They may have the authority to do that now at HCFA; they may not.

Mr. TRESNOWSKI. They are fairly far along, you know.

Chairman STARK. I understand that. And my point is that I would like to encourage the cooperation. I think that our role would be to see that if the system that you came up with for some reason prejudiced the Medicare system, I think we would have to say no, and Medicare would have to do their own. I do not really anticipate that.

But I do ask, in all good faith, what we can do, not to limit what you do, but to see that the Government programs go in a compatible direction? I think that would be important for us to know, as soon as you can let us know.

Mr. TRESNOWSKI. Well, they are sitting with us, and they will have their opportunity to express their view, and we hope that we are very compatible when we finish our work.

Mr. BROPHY. Mr. Chairman, if I could make one additional comment. In Mr. Sanders' testimony he mentions some incentives; for example, speeding up the payments to physicians.

Now I think that is something that the Government could do—

Chairman STARK. Oh, absolutely.

Mr. BROPHY [continuing]. To provide incentives for the physicians to embrace this system.

Chairman STARK. Yes, and not only that, but, I mean, if the physician had—if we could simplify the physician's hassle factor, if you will, and pay immediately and go back retrospectively if we had to and audit, I think we could design a lot of things that would en-

courage the physician to want to participate. And that is exactly what I was getting at.

There are areas like that that I think we may have to suggest on our side. And as long as the system does not prejudice anything you all want to do, I think we are in good shape.

Mrs. JOHNSON. I wanted to just follow up on that.

Actually we have got to do something about the way we reimburse physicians in the Medicare system, but also the way we oversee what we pay for, and I personally have been deeply involved in some audit problems recently and do not look forward to a system that pays and then retroactively from audits.

And recently, Mr. Brophy, Travelers received a management information system summit award for information technology excellence, and it is very pleasing to have you a part of this team on uniform billing, having succeeded in developing the technology for managed care well beyond that of anyone else at this moment in the private sector.

So is there going to be a way we can use some of that work that you are doing in the private sector with managed care to address some of our billing problems in Medicare, so that we do not get into retroactive reviews and audits, so that we can do a better job of timely evaluation of both service and reimbursement?

Does that technology that you have been developing for Travelers, is that going to have any—offer any opportunity for use on the next rung of this ladder, because there are many areas that we have to work in? But certainly that is going to be one of the most important.

How can we better oversee and review and pay at once without the kind of kickbacks that we are getting in the current system of hassle?

Mr. BROPHY. With that technology, we have demonstrated that you can focus on quality, and you can drive the system using better information. The fact is that it is all achievable using current, existing technology. And there are no secrets in our industry. I think that system, now that it has greater visibility, is going to attract attention.

I think others are going to begin to emulate it, because they are going to realize it is doable, it is practical, and it does lead to higher quality and more cost-effective care. Information is captured upfront in an electronic form and does improve literally by orders of magnitude the quality of data, if we do things right the first time. And I think it minimizes the need for retroactive reviews.

Mrs. JOHNSON. And if Medicaid began to get into more managed care forms of delivery of care, or if Medicare begins to move in that direction, would the kind of technology that you have developed enable us to reduce the costs and some of the problems in our intermediary system?

Mr. BROPHY. We are a very large intermediary for Medicare. Under the auspices of Medicare, we developed the standard system for part B. We worked very closely within Travelers and so all of that knowledge is being shared with our people in Medicare, and I know there are conversations with the people in HCFA.



So I am sure that is all being made available, and I would hope that they would adopt that. I am pretty sure they are—will be—influenced very much by what we are doing.

Mrs. JOHNSON. Thank you very much. It has been a pleasure to have you both.

Chairman STARK. Thank you.

Mrs. JOHNSON. Thank you, Mr. Chairman.

Chairman STARK. I would like to thank the panel very much. We appreciate your testimony.

If the concluding panel of witnesses would like to approach the table, we will recess for 2 minutes, and we will proceed with the panel in just a few moments.

[Recess.]

Chairman STARK. We will proceed with our concluding panel, which consists of Dr. Ralph Korpman, who is president and chairman of the Health Data Sciences Corp., representing the Health Industry Manufacturers Association; Alice Lusk, who is the president of the Health and Benefits Division of the EDS Corp., representing, I suppose, the H. Ross Perot for President campaign. [Laughter.]

Mrs. RUSK. I don't believe so. [Laughter.]

Chairman STARK. And Frederick L. Morefield, the vice president and general manager of Data Interchange Service Division of the SMS Corp.

Ladies and gentlemen, your prepared data will appear in the record in its entirety. If you would like to expand on that or add to it in any manner that you are comfortable, please proceed.

Dr. Korpman.

#### STATEMENT OF RALPH A. KORPMAN, M.D., PRESIDENT AND CHAIRMAN, HEALTH DATA SCIENCES CORP., SAN BERNADINO, CA, ON BEHALF OF THE HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

Dr. KORPMAN. Thank you, Mr. Chairman.

It is a pleasure for the Health Industry Manufacturers Association to be represented here today.

There have been long discourses this morning about sending data between hospitals, and physicians, and payers, and payees; it turns out that in most cases we, the health care information system manufacturers, are the people that must perform that task. Doctors want to get paid; hospitals want to get paid. The payers do not actually want to pay anybody, but they have to, and so they do eventually. And somehow we manufacturers have to make it happen.

You heard the gentleman from the Michigan Hospital Association talk about the nine volumes of Blue Shield/Blue Cross rules. We have to master those rules for every hospital for all payers in every State. This is a daunting task and leads to one thrust of our testimony, which I think will be fairly consonant with the other testimonies that you have heard here today.

I must surface a major caution here, however: listening to this discussion, one begins to believe that the job of U.S. health care must be to care for bills. Lest we forget, the job is to care for patients; an area we will address later. When one talks about administrative simplification, however, talking about simplification of

bills is an important early step and something the manufacturers would desperately like to see.

Coming up with communications standards—which are radically different from data standards—is not very hard if you can get all the right people in the right room at the same time. As has been pointed out several times today, the agreement of HCFA to sign up for ANSI X-12-835—this is the American National Standards payment record standard for which HCFA has finally signed up after endless urging—makes this standard a great deal more valuable than it once was.

The health industry manufacturers have been involved in ANSI X-12 insurance standards since their inception, and we are thrilled that this level of standard is transpiring.

But billing communications standards are just a tiny piece of the issue. Communications standards are enabling—and you can extend them and you can deextend them, but defining the fact that you have 10 character positions for a doctor is one thing; defining who the doctor is or who the patient is or some of the things that have been brought up are the really vexing problems.

One issue which has been mentioned several times, but which I do not think has had adequate attention paid to it yet, is the issue of quality control and utilization review, and how you wish to accomplish the review of clinical data that theoretically occurs concomitantly with the billing data processing. UB-82 has a small box on the form for that, which does not work. Every payer has you fill it out differently; a lot of payers require a number of attachments; the PRO's come in the next week and pull individual charts, and so does everyone else.

Physicians typically spend about a third of their aggregate practice time—and nurses typically spend close to half of their aggregate practice time—doing clerically related work. This is simply to collect enough data eventually, so that one can take proper care of patients, and also so that others can come back and do some of these reviews later.

Although they are needed, there are not proposed standards for doing these reviews or for assembling the necessary clinical data, with perhaps the exception of the Uniform Hospital Data Set, which is a small step toward accomplishing this, but only a small one.

Several speakers here have pointed out that technology is not the pacing item. The technology is available if the will is available.

As a company, Health Data Sciences is installing an integrated patient-centered system for the public hospitals in New York City where all 16 hospitals, 4.5 million outpatient visits, 1.5 million ER visits, and 10,500 beds will be sharing a common clinical record. It does not matter where a patient appears; it does not matter who the patient is; the data is not just billing data, but lab results, x-ray results, and all clinical data which is important.

Once you have all clinical data on-line, doing record review is easy, because you do not really want to do record review. You want to check health care data as care is taking place. To find out a year from now that you did a bad job a year ago, and you should not be paid, may save a few dollars but is not very good for the patient.



Chairman STARK. And would you not agree that the country would be better off, even if it is your competitor who wins the nationwide bid, if we end up with one system, so that if somebody leaves the New York hospital and goes to the Florida hospital, the records can be picked up over the phone or by satellite or however?

Dr. KORPMAN. Well, one system, no.

Chairman STARK. No?

Dr. KORPMAN. One system would be fine, but I do not think anybody—

Chairman STARK. One standard so that—

Dr. KORPMAN. One standard, yes.

Chairman STARK. So that systems could talk to each other.

Dr. KORPMAN. So that systems could talk. And to develop that standard, you need far beyond a communications protocol. You need a standard data model for health care information. That is sorely lacking.

The American National Standards Institute has recently begun another activity in which the health industry manufacturers have been very active, as have been most of the affected branches of Government. The last meeting was attended by Social Security, HCFA, GAO, and a host of other people that needed to be there. This activity is the Health Information Standards Planning Panel, whose goal it is to take the broader informatics issues, which are on a dollar basis far more compelling, and address those on a standards basis as well. The more we can do that, the better off we all will be.

In summary, coming down to some specific recommendations, there is little question that the more uniform the transmission between all of the participants in health care, the better off we will be.

Can the Government help? Sure.

Do you need to help by having 9,000 people sit in a room and write every last jot and tittle of every data field? Probably not.

Do you need to put a structure around data collection that is stronger than UB-82 was? I expect that would be useful, and I expect incentivizing people, via whatever mechanism, to invest in their own institutional information infrastructure to support these things would also help.

On a broader base, as a veteran of the banking industry, I am sure you are quite aware that banks typically spend between 5 and 10 percent of their operating budget on information system support. That is because banks are an information industry, even though they also move money.

Chairman STARK. That is all money is, is information.

Dr. KORPMAN. Right. Health care, too, is an information industry. Do not let anyone fool you. It is not a service industry; it is not a product industry, even though it does all those things. It is an information industry. Most health care workers are information workers.

A hospital typically spends between 1 and 2 percent of its operating budget on information systems.

Just in the last 2 or 3 years, hospitals have finally realized that they have made a strategic mistake, and they now need to do something different; unfortunately, this realization comes at a time

when hospitals have almost no money for capital formation. I will wave the money flag here, although that was not my point.

Any incentives that hospitals can get to work on their information infrastructure will be contributory not only to getting the bills out, which is nice, and getting them paid, which is great, but also to addressing this broader and more vital requirement: How do we get patient care information—which is what is important—to the right providers at the right time?

We the manufacturers are the people that inevitably will have to do this, because we provide most of the systems for most of the hospitals and many of the physicians in this country. Technologically, I think we are at the threshold of being able to do most of this already via several techniques, all of which seem to work. The incentives to do it and the incentives to create standards that are interchangeable are areas where the Government can be effective, and we would support such efforts.

Thank you.

[The prepared statement follows:]



STATEMENT OF RALPH A. KORPMAN, M.D.  
ON BEHALF OF THE  
HEALTH INDUSTRY MANUFACTURERS ASSOCIATION  
BEFORE THE  
COMMITTEE ON WAYS AND MEANS  
SUBCOMMITTEE ON HEALTH  
APRIL 2, 1992

Good morning, Mr. Chairman and members of the Subcommittee, I am Ralph Korman, President and Chairman of Health Data Sciences Corporation of San Bernardino, California. Health Data Sciences is a small but rapidly growing company of 180 employees that produces an innovative new generation of bedside integrated health care information systems. I am pleased to represent the Health Industry Manufacturers Association (HIMA), which is a national trade association representing nearly 300 companies that manufacture medical devices, diagnostic products, and health care information systems. HIMA company sales represent more than 90% of the domestic market. I appreciate the opportunity to appear before you to discuss HIMA's perspective on administrative simplification in health care.

Representatives from HIMA have participated in hearings before the Ways & Means Committee about health care reform. For example, on October 22, 1991, Raymond Gilmartin, Chief Executive Officer of Becton Dickinson and Company of Franklin Lakes, New Jersey talked about the importance of productivity in the health care policy debate.

Mr. Gilmartin noted that in most sectors of our economy productivity has been the key to overcoming inflation and continually expanding the availability of goods at affordable prices. He also observed that productivity was almost always overlooked in this debate.

We believe productivity can contribute to the improvement of our health care system. HIMA companies further this goal in at least two ways. First, innovative new medical devices and diagnostic equipment will continue to improve the treatment of illness and disease while in many cases lowering costs. Second, and most relevant to the subject of this hearing, a whole subset of HIMA's membership develops and manufactures health care information systems. Health Data Sciences and SMS Corporation, which is also testifying this morning, are members of this segment of the industry.

I would like to begin by commenting on the administrative costs of health care in our system today. Observers of all persuasions have noted that the administrative costs of the U.S. health care system are far in excess of those of virtually any other system. In a 1987 study published in the New England Journal of Medicine, U.S. administrative costs comprised 24.1% of total health care costs; in Canada, administrative costs were only 11.1%. At the current annual U.S. expenditure level of about \$700 billion, the difference in these two administrative percentages aggregates to over \$90 billion annually. It is obvious that any reduction in administrative costs which allows dollars to be returned to direct patient care will be beneficial.

The proposed reforms being considered by the Subcommittee on Health today primarily concern methods for improved manipulation of payment, fiscal, and administrative data. This focus underscores a fundamental, yet often under-appreciated fact concerning health care: health care is an information industry. Most health care providers spend the majority of their time creating or using information. Only a small percentage of this information is then abstracted and used for submission to payors, reviewers, and other agencies.

Unfortunately, although it is an information industry, health care lags behind virtually every other information industry in its level of expenditures on information support and in its use of automation to improve efficiency, efficacy, and quality. While most other information system industries spend from 5-10% of their operating budgets on information systems, health care institutions typically spend only one to two percent, leaving the bulk of the repetitive and error-prone clerical work to be performed manually, often by highly compensated professionals.

The health care information systems (HIS) suppliers that are members of HIMA provide services and systems for clinical, administrative, and financial processing to many of the hospitals and physicians in the United States. Most HIMA HIS members have been actively involved for some time in the very efforts which are now being studied by the Subcommittee.

HIMA is also a sponsor of the Health Industry Business Communications Council (HIBCC), a consortium representing health care business partners. HIBCC was founded by HIMA, the American Hospital Association, the Health Industry Distributors Association, the Pharmaceutical Manufacturers Association, and the National Wholesale Druggists Association. The primary charter of the Health Industry Business Communications Council is to facilitate standardized communications among participants in health care delivery: manufacturers, distributors, providers, and payors.

Now I would like to discuss some specific recommendations. First, we recommend that uniform formats, on-line data interchange, and consistent audits and screens for all components of health care delivery be standardized. Many hospitals in different states use the same basic software provided by HIMA HIS members. Nevertheless, each hospital must pay (in one way or another) for modifications to allow that software to respond to the peculiarities of a particular state's non-uniform use of the uniform bill. HIMA believes that mandating a truly uniform bill format, with uniform data elements and codes, accepted by all insurers and public payors would be one of the simplest mechanisms for obtaining immediate health care system-wide administrative savings.

Once unified forms and codes are adopted, the transition to electronic billing and fiscal transfer would be a facile and natural next step. The technology is in place now to deliver these benefits; all that is lacking is a mandate for the uniformity that will make it practical. The basic technology for an all-electronic reimbursement system has been available for some time and is supported by most vendors. However, the multitude of data formats (over 400 by some estimates) has made the necessary technologic investment overwhelming for most. HIBCC has represented the HIS manufacturers in the ANSI X.12 deliberations which have lead to the new ANSI 835 standard, a small but important step forward in this area.

Several HIMA HIS manufacturers, including both Health Data Sciences and Shared Medical Systems speaking here today, have already incorporated on-line verification of eligibility and benefits directly into their health care system-wide information systems. The incorporation of such checking as a seamless part of the hospital's total information system, rather than as a separate stand-alone eligibility checking step, further serves to eliminate administrative overhead, while automatically providing the necessary verification of a participant's insured status.

HIMA also recommends the standardization of audits and screens for billing and clinical data, information which is often reviewed as part of determining eligibility and continuation of benefits. This would provide another singularly significant contribution to reducing administrative costs.

One of the reasons why uniform bills are not uniform is that different intermediaries and carriers have elected to apply different audits and screens to their bills. These audits typically require clinical and administrative data elements which vary from payor to payor. Compounding this is the fact that independent insurers, HMOs, employers, and other payors and auditors impose yet other screens, tests, and audits on data, many of which may not be readily performed using data from standard UB82 submissions.

Today, not only must each health care provider independently determine (via consultation, receipt of memoranda, and other mechanisms) what the rules of the day are, but this information must then be transmitted to the health care information systems vendor, who must then charge for the appropriate programming and testing to allow the institution's information system to provide the appropriate information in the appropriate way, until it changes again.

Multiplied by all 50 states and the large number of payors in each, the management of this audit control task becomes daunting for payors, providers, and information systems purveyors, causing a significant administrative burden for each participant. Eliminating the complexities of this process via the use of a standard set of audits and screens would not only be a significant contributor to reducing administrative work, but would likely also improve the quality of the data extracted.

The advantages of uniformity and rapid electronic mediation of communications for basic administrative information seem clear to the careful observer. The proposed reforms discussed above would improve the administrative efficiency of this small component of health care delivery. However, these reforms only begin to scratch the surface of available administrative/clerical cost savings in health care. There are significant additional "administrative simplifications" not addressed in the proposed reforms which could reduce administrative overhead far more.

These additional potential savings would come from systems used to determine the adequacy, appropriateness, and sufficiency of services such as utilization review, quality assurance, and other concurrent and post treatment analyses. These procedures are a major focus for both

providers and payors, and are a key to both the cost and the quality of care. Examination of the administrative overhead invested in assuring these parameters reveals a large number of additional areas where costs can be reduced or eliminated.

About one-third of a physician's time and almost one-half of a nurse's time is spent doing clerical/administrative work, time that could be far more effectively invested in patient care. Some of this clerical work is directly related to the reimbursement scenarios described above: attestations; a variety of coding schemes required to meet a variety of payors' requirements; and extraction of certain clinical data elements to meet audit criteria. This list varies from hospital to hospital, but in all cases collecting the data involves virtually all providers. Much of the rest of this clerical/administrative time is spent in attempting to assure that the right thing is happening to the right patient at the right time and then documenting what actually did happen.

State-of-the-art hardware and software already being delivered by health care information systems vendors, especially integrated point-of-care based systems, can significantly decrease the amount of time professional providers must spend delivering "paper care" instead of patient care. On-line integrated patient-centered systems assure that the proper information necessary for making both clinical and administrative determinations about a patient's status is collected when available and delivered when and where it is needed, rather than being managed in separate time-absorbing and error-prone steps well after the event.

Point-of-care based automation allows appropriate screening of data to be performed as care is being given, whether it be at the bedside, in the ER examining room, or in a physician's office. Since data is captured in real time, it can be checked for appropriateness, completeness, and errors as care is delivered, not days or weeks later as is currently the case. Of course, detecting such potential problems as they occur not only enhances quality, but also eliminates the large numbers of administrative staff who now attempt to detect such problems retrospectively.

Similarly, automated scheduling and operations optimization capabilities allow care-givers to transfer the task of attempting to assure proper resource utilization to the computer, which does a far better job at this kind of rote process. This kind of task transfer allows care-givers to get back to the job delivering care, rather than spending time attempting to figure out the best way of managing too few resources for too many patients.

With the on-line availability of most or all clinical and administrative data, quality assurance and utilization review activities can be performed at central sites in an automated fashion, rather than on a case-by-case basis using expensive chart reviewers. As practice parameters, case management, care maps, and other concurrent control mechanisms are put into place, the ability to monitor such controls both within the institution and at payor locations using largely automated techniques will not only enhance the quality of care, but will significantly decrease the often error-prone and always clerically intensive evaluation process. Even better, the availability of uniform data will make such reviews more fair and more reliable.

Because of the pervasive nature of the clerical/administrative burden in the delivery of patient care, most state-of-the-art, integrated patient-centered systems have generally been shown to save from one-half hour to one and one-half hours per provider per shift when properly implemented. Since 60-80% of health care operating costs are personnel costs, this amount of time saving can provide a significant level of cost reduction. Purchasers of such systems have, in fact, typically found themselves with two to three year paybacks on assets with a seven year useful life; larger users have even faster returns on investment.

Most importantly, these savings are not achieved at the expense of quality. Rather, the elimination of the highly error-prone paper documentation and control system actually improves quality by amounts as high as 40%. Finally, the automation of the bulk of the clinical record allows facile extraction, with little human intervention, of information necessary to perform not only care appropriateness and reasonableness checking, but also to support the kind of medical effectiveness research currently being undertaken by the Agency for Health Care Policy Research and others.

These state-of-the-art approaches to health care automation have an additional advantage as well. Most changes in administrative systems over the years have been designed primarily to save money for payors. New forms, new data screens, and the like have generally been imposed by payors on providers in an effort to make the payor more efficient or to distribute fewer dollars.

Oftentimes these changes cost providers substantially in terms of both time and money. The technologies described above create a unified and level playing field for information, allowing significant paperwork reduction and administrative reduction for both payor and payee. This win-win situation bodes well for the adoption of such new systems.



It is interesting to note that these state-of-the-art approaches have been more rapidly adopted (on a percentage basis) in the Canadian delivery system than in the U.S., even though the potential reduction in administrative costs in Canada is less because such costs already start lower. Considering the worldwide crisis in health care costs, it is clear that no amount of avoidable clerical overhead is acceptable, even in environments where expenditures are already lower than they are here. The reduction of "paper care" in the United States can only yield even greater results, since the expenditures are so much higher.

There remain two primary impediments to bringing state-of-the-art systems into widespread use. First, as mentioned above, the health care system in the United States spends far less money on information support than do other information industries and is thus, not surprisingly, far less automated than such industries. This low level of expenditure is offset by a far higher level of expenditures for highly trained health care providers to perform the administrative chores that should be automated. The obvious impediment to rectifying this situation now is the availability of capital resources for automation.

With the many demands on the health care system, many hospitals have had, and continue to have, difficulty allocating the not-insubstantial dollars necessary to create an information infrastructure appropriate for the extraordinary amounts of information required to support health care delivery. Even when there are demonstrable operating returns to pay for a system, if the health care facility does not have the ability to procure capital to acquire the system, it will not be acquired. Most hospitals have so many capital demands that they are faced with Hobson's choices with regard to facilities, modalities, and information systems.

The second, and perhaps less fundamental impediment remains the fact that "people love innovation but hate change." As various administrative and support systems have been put into place, they have developed substantial numbers of users who are familiar and comfortable with them, including many whose jobs exist solely for such systems' support. Working through the change process is often done more easily when there is outside pressure to change.

Because health care remains the information industry with the least investment in information infrastructure, the benefits to be realized by facilitating the removal of impediments to improving this infrastructure are potentially enormous. As a first step, the adoption of uniform standards for reporting, auditing and reimbursement that HIMA recommends would certainly help to ease this task.

Assisting institutions with the acquisition of an enhanced informatics infrastructure designed to relieve professional providers of clerical work and to make data available for payors and auditors would yield even greater benefits. Such assistance could be in the form of targeted monies, adjustments to reimbursement formulas, financial benefits for the availability of on-line clinical data, and the like. As has been shown in other information industries, any "jump-starting" done for an institution should be more than recovered by later operating returns.

Since multiple vendors provide systems which manage clinical and administrative data and since such data must be shared with a number of other interested parties, the issue of standards immediately arises. It is clear that the better the standards for health care data interchange, the better the data reaching reviewers, payors, and other interested parties is likely to be. Standards for the interchange of some administrative level data, such as the ANSI 835 standard, address some of the basic issues. Much broader issues, requiring an integrated health care data model and glossary, must be solved to provide final relief of the aggregate information handling burden.

Finalization of the Uniform Hospital Data Set will be a step in this direction. Similarly, ANSI has recently formed a Healthcare Information Systems Planning Panel, in which HIMA is active, that is aggressively moving forward in addressing these issues. The development of such standards will take some time, especially since a comprehensive integrated data model for health care information has only rarely been produced. Nevertheless, the benefits of pursuing nonredundant, uniform standards are obvious and so large that the time invested will likely be well worth it.

In conclusion, the often technologically and professionally superior U.S. health care system has increasingly found itself a victim of an "unwinnable" paper chase. Providers and payors both spend a major portion of their time and resources performing administrative tasks which are duplicative, ambiguous, conflicting, and often unnecessary. The technology already exists for addressing many of these areas of "make work". The health care information system manufacturers were among the first to realize the potentials being reviewed by the Subcommittee on Health and the even greater potentials as these problems are more broadly examined; we stand ready to assist in the implementation of the solutions.



Chairman STARK. Thank you.  
Ms. Lusk.

**STATEMENT OF ALICE LUSK, PRESIDENT, HEALTH AND BENEFITS DIVISION, ELECTRONIC DATA SYSTEMS CORP., PLANO, TX**

Ms. Lusk. I am Alice Lusk. I am president of the Health and Benefits Division of EDS.

We formed our company in 1962 starting in the health care business. Today we are 70,000 employees and \$7 billion in revenue in 30 different countries. We still have a very substantial presence in health care, and it is a very important industry that we serve.

We primarily serve Blue Cross and Blue Shield plans, commercial insurers, and managed care players as well as serving 17 States through their Medicaid programs and providing services in the Medicare in 11 States.

Our message is very simple and straightforward, and I support everything that Mr. Korpman says in that we believe very strongly that a technology infrastructure is critical to addressing the issues of health care, because it is an information business. We manufacture information, and we need to analyze information to solve the cost and quality issues.

I would like to spend just a couple of minutes talking about two specific examples of where we have been involved, first with our parent, General Motors, in terms of helping them both simplify administration, but more importantly address the bigger portion of the health care dollar, which is benefit dollars.

When GM acquired us in 1984, we joined with them, the UAW, and their carriers in forming a partnership to simplify and to impact their health care costs. They were growing at 14 percent, twice the rate of CPI, and felt at some point that would be not only their biggest expenditure, but already in 1984 their biggest supplier was Michigan Blue Cross and Blue Shield.

We worked with them to implement a more simplified administration environment, which required a single corporate eligibility system, a national claims processing system utilizing over 60 different Blue plans as well as commercial carriers, and the real positive result, though, was a management information base that gave them access on a monthly basis of where their dollars were being spent.

Prior to this implementation, they were having health care data—receiving it sometimes in a 2-year timeframe. Over a period of 3 years, their health care expenditures dropped into single digits to 7 percent and saved over \$800 million in their total health care expenditure.

That concept of having a single administrative system across the country then moved into an environment that we call NASCO, the National Account Service Co., which is comprised of over 60 Blue Cross and Blue Shield plans, which today is implemented to cover over 4 million lives and serves companies like General Electric, AT&T, Bethlehem Steel, NYNEX, Kmart, and Rolm.

What is key again is the single national system that allows the advantages of local provider relationships and local provider service.

Our vision for health care is fairly straightforward, and that is to continue the implementation of technology wherever we can to impact the cost and quality issues around health care. A lot of the things we have talked about so far this morning, like electronic data interchange, is a big part of it. We are actively involved with Harvard Community Health Plan in building clinical systems. We are working with HCFA in imaging solutions. And so there are a number of technology capabilities that work today that are in the marketplace.

The real key, though, for a company like EDS, which is a technology company, is that we need to focus on not building technology for technology's sake, simply so that we add another component to the cost structure, and more importantly that we work very closely with our competitors in ensuring that our solutions can talk to each other and are integrated, so that the combination of implementing good administrative systems creates the framework to where we have information databases that all the players in the marketplace can share and therefore really tackling the big dollars around health care, which are the benefit dollars.

Thank you very much.

[The prepared statement follows:]

## Testimony of EDS Before The House Ways and Means Subcommittee on Health

April 2, 1992

Mr. Chairman and members of the Subcommittee, I am Alice Lusk, President of the Health and Benefits Division of Electronic Data Systems. I am pleased to be here this morning to discuss the technology solutions EDS has implemented to assist General Motors and other major public and private payers in the administration of their health plans, and to share with you our vision of the future in health care information technology and how that vision relates to administrative simplification and cost containment.

Before I tell that story, however, I want to take a moment to congratulate you, Mr. Chairman, and your colleagues on this subcommittee, for the leadership you continue to provide on national health policy issues. EDS appreciates your holding today's hearing to focus national attention on the need for administrative simplification in our health care system.

EDS was founded in 1962 as one of the first information technology corporations. In the early 1960s, companies purchased computer equipment, but received little operational support. To help companies make the best use of their computer systems, EDS provided information technology services. Our earliest customers included small insurance companies, but we soon diversified our business base to include contracts with state Medicaid programs, Blue Cross and Blue Shield plans and major commercial insurers.

Throughout the past two decades, EDS has developed an extensive customer base among federal, state and local governments, insurers, banks and other financial services organizations, manufacturers, utilities, transportation companies, and retailers. Our continued growth has led to the creation of 19 information processing centers and 86 data centers to serve our clients' needs. EDS-NET -- the world's largest private digital communications network -- links information technology locations across the globe.

In 1964, EDS had 13 employees and \$405,000 in revenue. Today, EDS employs more than 70,000 people in 30 countries and has annual revenues exceeding \$7 billion. In 1991, more than 500 million health care claims were processed through an EDS system; we believe this represents about 20 percent of all claims processed nationwide.

Our private health care business includes contracts with 10 Blue Cross and Blue Shield plans, 19 commercial health insurers and several managed care plans. Additionally, as the provider of claims, membership and client reporting services for NASCO -- the National Accounts Service Company of the Blues -- EDS supports 60 Blue Cross and Blue Shield plans in areas covering 90 percent of the US population.

With respect to public financing programs, EDS is the largest processor of Medicaid claims nationwide. We currently have contracts with 17 Medicaid programs, with services ranging from fiscal agent to insuring agent. In addition, EDS provides Medicare Part B information processing services in 10 states.

The message I am here to deliver today is a simple one: a strong technological infrastructure is critical to addressing the pressing problems we are confronted with in our health care system.

Let me be clear about what I mean by this statement. Technology alone cannot lower health care costs, cover the uninsured or improve quality. Unfortunately, there is no technology magic wand that can be waved to eliminate these problems. We can, however, establish a technological infrastructure that reduces the hassle factor and waste in administration and, much more importantly I believe, supplies timely and accurate information to the managers of our health care system. And we can do so with existing technology, in a multi-payer, competitive environment.

EDS' experience in supporting the administration of the General Motors health program is a case in point, and most of my remaining remarks will explain how EDS was able to create the convenience and economies of a single payer system for GM without eliminating the local servicing provided to GM employees by their 75 insurers.

When General Motors acquired EDS in 1984, we assumed responsibility for private health care information technology for two million GM employees, retirees and dependents. EDS' role was to implement a nationwide claims system consisting of 40 major and 35 smaller insurance plans, and develop and install the necessary tools to monitor the effectiveness of GM's health care benefits and systems.

For ten years prior to the acquisition, GM health care costs had risen at an average annual rate of 14 percent, more than twice the medical CPI. In 1974, GM health care costs were \$600 million. By 1984, these costs totalled \$2.4 billion! In 1984, when the average American family was spending about \$1,800 in health care, GM was spending more than \$3,000 for each covered employee or retiree and their families.

At that time, GM health care claims were being administered primarily by 69 local Blue Cross and Blue Shield plans, plus 6 commercial carriers. In addition, the company had contracts with 125 health maintenance organizations. In the indemnity world, the result of multiple eligibility and claims payment systems was inconsistent payments, local interpretation of GM's health plan, and extremely weak cost containment. Management information needed to support the latter was untimely, incomplete and inaccurate, making it virtually impossible to track trends in utilization and costs, or spot abuses.

To address its health care cost problems, GM formed a partnership with the United Auto Workers and EDS. The results of that partnership have been dramatic. In the first three years alone, GM reduced its health care cost trend to less than 7 percent, saving approximately \$800 million. Last year, when major employers were averaging health care cost increases greater than 20 percent, GM's health care cost inflation continued to be in the single digits.

How were these savings accomplished, and what did information technology contribute to the equation? First of all, during the 1984 labor negotiations, the UAW agreed with GM that waste in health care expenditures had to be eliminated, and that programs could be put in place to do so, as long as legitimate benefits for GM workers were not affected and the quality of health care was not sacrificed. The result was the introduction of Informed Choice, a triple option program which allowed GM employees and retirees to select either traditional indemnity coverage, a preferred provider organization or an HMO.

To support the massive implementation of Informed Choice, GM turned to EDS. Together, GM and EDS mapped out a new strategy for more efficient claims processing and more effective payment controls. The basic foundation for the new delivery system was a centralized, corporate-wide eligibility system integrated with a nationwide, centralized claims processing system that ensures consistent adjudication and a single data base of health statistics.

Creating a centralized eligibility data base system was a challenging task in its own right, but it was complicated by the fact that it had to be completed in four months because of agreements made during the collective bargaining process. Not only was a complete file of all 830,000 insured employees and retirees built for the first time within GM, but every person's records had to reflect the option selected under Informed Choice.

The next step was the creation of a nationwide network for integrated claims payment. EDS adapted its own health care processing systems and its nationwide telecommunications network to link all the carriers to GM. Thanks to this integrated system, all changes or alterations to the GM benefit plan are made at one point in the system, and they immediately affect claims from all locations. As a result, all claims are processed uniformly, regardless of where the claim originates. Gaps in coverage for employees, retirees and dependents moving to different states have been eliminated.



Equally important is the fact that all claims are verified against GM's eligibility file to ensure that the person is properly covered. Since the eligibility system is read by the claims system each night, changes in the enrollment status of employees or retirees are available immediately. This assures claims are paid with the most current eligibility information, thereby eliminating erroneous payments or denials of claims and improving corporate and employee satisfaction with the system.

Once the integrated claims processing system was in place, management systems were added to analyze the single payment file created by the system. Information which used to take several months to accumulate is now available within 45 days of claim processing. Costs are allocated back to local plant management, who can take a role in analyzing and controlling expenses. Corporate management can examine its benefit offerings and make changes for more cost-effective, competitive arrangements. With timely information, they can accurately project future spending trends and prepare for economic fluctuations.

More importantly, GM can now identify where its benefit dollars are going and target areas for special attention. For example, in 1990, in response to an analysis of substance abuse utilization and costs, GM implemented a special managed care program. In the first year alone, the company reduced its expenditures on substance abuse from \$81 million to \$56 million.

With this financial information available in one statistical data base for analysis and projection, GM and the UAW are also better prepared for future negotiations. During bargaining, GM and the unions use an ad hoc reporting tool developed by EDS to forecast what impact the changes under consideration will have on employees and operating costs. Proposed changes in health care benefits can be implemented immediately after agreement.

EDS' relationship with the National Account Service Company -- NASCO -- offers another concrete example of single payer convenience and efficiency in a multi-payer environment. NASCO is a joint venture of five large Blue Cross and Blue Shield plans: Blue Cross and Blue Shield of Michigan; Empire Blue Cross and Blue Shield; Blue Shield of California; Blue Cross and Blue Shield of Connecticut; and Blue Cross and Blue Shield of New Jersey. Through NASCO, EDS provides claims, membership and client reporting services for more than 100 major multi-state account health programs, including those of GM, General Electric, Bethlehem Steel, AT&T, Chrysler, K-Mart, Macy's, Midlantic Bank, NYNEX, Rolm, Bank of America, and UPS. The national accounts supported by NASCO and EDS represent over 1.75 million employees, or 3.9 million covered lives.

Sixty Blue Cross and Blue Shield plans comprise the NASCO network. Forty Blue Plans fully participate with NASCO. By that, I mean that they provide claims adjudication and customer service support on-site. The remaining 20 plans receive claims and forward them to a participating Plan for entry and adjudication in the NASCO system.

EDS-NET links the NASCO network of Plans to the central NASCO processing system. This national telecommunications network provides each NASCO participating plan direct, on-line access to claims, eligibility and utilization information. The most significant benefit of this national capability is that it provides for consistent benefit administration and adjudication nationwide, while taking advantage of local discount arrangements through the Blue Plans' existing provider relationships. Other benefits include localized service for the employers and providers who submit claims, and access to uniform data for the analysis of utilization and expenditure trends.

I would like to share a few of the innovative programs we have developed using these technologies to help our Medicaid customers pay claims faster and more accurately, eliminate fraud and abuse, and reduce the hassle factor for patients and providers. In Massachusetts, our Medicaid customer has implemented EDS' Recipient Eligibility Verification System (REVS). Under REVS each Medicaid recipient receives a plastic card with a magnetic strip on the back, similar to a banking ATM card. Each time he or she seeks health care services, the provider either runs the card through a point-of-sale device to verify eligibility, or uses a touch tone phone to access the same on-line information.

REVS provides Massachusetts with the ability to turn off benefits for recipients on the day their eligibility runs out. Previously, recipients were given a Medicaid card each month with their welfare check, essentially guaranteeing their eligibility for the entire month. The ability to administer Medicaid in the way it was intended saved Massachusetts \$13 million in the first year of REVS. These are net program savings, after subtracting out the cost of running the new system. An extra benefit for providers is that when a patient is no longer eligible for Medicaid, REVS automatically furnishes information about the availability of other coverage for payment.

Mr. Chairman, I am pleased to report that through concerted efforts on the part of EDS and the state agencies who are our customers, more than half of all Medicaid claims we process are submitted electronically. The advantages of electronic submission are clear: elimination of all the data entry costs, as well as the time required to follow-up on errors made during data entry. In addition, providers can be paid faster and more accurately. To encourage electronic billing, EDS makes software available for providers to use on their personal computers, and provides programming and formatting assistance when tapes are to be submitted. We believe our high percentage of electronic claims is one of the variables that contributes to the fact that in the ten states with the best claims processing times nationwide, EDS supports Medicaid administration in eight.

EDS is currently assisting our Medicaid customers in Arkansas and Alabama to implement MATSAS -- the Multiple Automated Transaction Submission and Adjudication System. In Arkansas, providers will be required by the state to file all of their Medicaid claims on-line, either through a point-of-sale terminal or computer-to-computer. To assure their compliance with the program, the state plans to purchase the required hardware for Medicaid providers, who will be responsible for the communication costs associated with the system.

In addition to on-line submission for 100 percent of claims, Arkansas' pharmacy claims will be adjudicated on line as well. This means that upon filing their claims, pharmacists instantly will receive a message indicating whether the claim will be paid, and the exact payment amount. If the state wants to, it can extend this technology one step further and pay pharmacists immediately through an electronic transfer of funds. In Alabama, MATSAS interfaces with technology already being used by the pharmacists in that state.

EDS has developed and implemented many other innovative programs in partnership with our health care customers to help them meet their specific business objectives. Rather than continue with examples, however, I would like to spend my remaining time discussing how information technology can be used to help shape an improved health care system for the future.

The members of this subcommittee know all too well the national health care problems we are grappling with: 35 million uninsured; health care costs that are far outpacing our ability to pay for them; and a public mandate for the highest quality health care available. The issues under consideration in today's hearing are what can be gained by moving toward a paperless health care system, and how the federal government can help speed the process along.

Mr. Chairman, a paperless health care system designed simply to eliminate paper should not be our goal. A paperless system by itself is not the solution to our health care problems. Our goals should be to reduce the rate of growth in health care spending, improve access for the uninsured and continue to provide high quality care. And the real issue is how we can leverage technology to assist us in achieving those goals.

Over the past several months, significant national attention has been focused on the administrative side of the health care cost equation, and opportunities for reducing administrative costs. The implication of lowering administrative costs is more money to spend on benefits, perhaps to cover some of our uninsured, or to expand preventive services.

No question, opportunities for administrative savings exist in many of our health programs, not just on the payer side, but among health care providers as well. And technologies such as the ones I've already described, plus a host of others, can help achieve these savings. However, the savings that can be derived on the administrative side of the ledger pale in comparison to those that are achievable on the benefits side. Ironically, our ability to generate those larger savings may well raise administrative costs due to required investments in the technology infrastructure necessary to support this effort.

Let me clarify my thoughts on this point. GM was willing to make such an investment to "re-tool" its health care management systems, and as a result believes itself to have saved hundreds of millions of benefit dollars each year since the inception of its Informed Choice Program. GM's integrated data base, which contains current eligibility, enrollment, utilization and cost data, supports information-driven decisionmaking by the company on an on-going basis. For example, by examining the demographics of its HMO enrollees and making some assumptions about their expected utilization patterns, GM has been able to adopt a very aggressive HMO pricing policy that has saved the company \$9-13 million each year since its inception in 1989.

So, in our zeal to control administrative dollars, we must not lose track of the big picture. And we must remember that an extremely important part of that picture is non-quantifiable, or at least very difficult to quantify. I am referring to the degree of complexity and aggravation we have introduced into our health care system over the years -- the so-called "hassle factor".

In all honesty, participating in our health care system, as either a patient or a provider, has become an administrative nightmare. The notion of empowering patients to be more involved and informed consumers of health care is a positive one. However, between complex billing systems, constantly changing plan provisions, and utilization management requirements, we have created a burdensome, bureaucratic maze that even the brightest among us cannot readily navigate. Instead of concentrating on a speedy recovery, patients and their families are forced to put their energies into filling out claim forms and coordinating payments.

On the provider side, the story is just as bad. Virtually every single plan has its own unique set of rules regarding utilization management and billing procedures that must be adhered to by the provider to assure payment. Providers that participate in many managed care plans have an especially hard time keeping up with their various requirements. It is not uncommon to hear physicians complain that half their time is spent on administrative issues rather than direct patient care, hardly a desirable outcome.

Mr. Chairman, I am pleased that the focus of today's hearing is on administrative simplification, rather than costs. Because I can tell you that right now we have the technology and information support systems to make our system far more "user friendly", and far more efficient. We can use existing technology to eliminate most, if not all, of the paper in our system, and we can assure the capture and sharing of standardized data. However, while these improvements would reduce the number of administrative and clerical staff on the provider end, and alleviate major headaches for health care consumers, they would not necessarily result in a net reduction in administrative costs.

The technology infrastructure I envision, however, would result in centralized data bases that could support information-driven decisionmaking about how best to manage the benefit side of the equation. This infrastructure would also support national health care quality improvement initiatives.

What is my vision of the future health care system? It is one in which all patient encounter data -- clinical and otherwise -- is entered directly into a computer at the time services are provided, facilitating not just billing and payment transactions, but the easy and immediate transfer of clinical information to other providers when the patient is referred for additional services. It is one where providers, payers, the government and various researchers can share information easily and inexpensively. It is a system where data confidentiality can be protected by software programs that limit how the information may be shared among the various entities. It is a multi-payer system that is able to accommodate unique features of each payer, without damaging the integrity of the information from a consistency standpoint.

It is all those things and more, Mr. Chairman. And, as I stated earlier, the technology needed to accomplish virtually all of this vision is available now. For example, EDS and its business partner, the InterPractice System, have developed a computerized patient medical record system that is already in place at the Harvard Community Health Plan.

What would be helpful from you and your colleagues on this subcommittee, and from the federal government overall, to facilitate this vision are four things. First, a long term perspective regarding the opportunities for technology to assist us in solving our health care problems, so that investments in the infrastructure can be made now with realistic expectations about when the payoff will be achieved. And it will be achieved. Look, for example, at the Defense Enrollment Eligibility and Reporting System (DEERS) that EDS installed for the Department of Defense in 1979. By its own analysis, DOD believes that DEERS has achieved savings averaging \$89 million per year for 13 years.

Second, we need to design our solutions for administrative simplification to solve or prevent specific problems, rather than assume that one generic set of solutions will address all problems. For example, "smart cards" are receiving tremendous attention in the media right now, but when queried about the desired benefits of these cards, no one seems totally sure about what their real function should be. We would suggest first identifying the desired benefits of a smart card, and then analyzing all the various technologies that could produce the same result before committing to a nationwide card strategy.

Third, we believe the federal government should use its position as the major purchaser of health care services to encourage the creation and implementation of the types of systems I have described this morning at a national level. Opportunities for system enhancements exist not just in the Medicare and Medicaid programs, but in CHAMPUS, the VA health system, and the Federal Employees Health Benefit Plan.

Finally, in the area of electronic data interchange, we believe the federal government should direct any interventions toward broad policy issues, such as the establishment of penalties to deter abuses of the networks, rather than focus on industry standards for information transmission. Based on our experience in the banking industry, where we have seen some of the earliest and most widespread uses of EDI technology, we have found that it is possible for an industry to establish its own standards -- several sets of them, in fact -- without government assistance. The result has been tremendous competition among banks, and they compete on the basis of price and services. We can accomplish the same result in the health care industry, if given the encouragement and the opportunity to do so.

I appreciate having had this opportunity to address you this morning, and I would be happy to answer any questions you might have.



Chairman STARK. Thank you very much.  
Mr. Morefield.

**STATEMENT OF FRED L. MOREFIELD, VICE PRESIDENT AND  
GENERAL MANAGER, DATA INTERCHANGE SERVICE DIVISION,  
SHARED MEDICAL SYSTEMS CORP., MALVERN, PA**

Mr. MOREFIELD. Thank you. Good afternoon.

My name is Fred Morefield. I am vice president and general manager of the Data Interchange Services Division of Shared Medical Systems Corp. We are known as SMS.

SMS is pleased to have this opportunity to testify on the potential for simplifying health care administration through the use of information technology. We have submitted to the subcommittee a written statement. Today, I would like to highlight some of the background material in that statement and then discuss the recommendations for legislation that we are making.

SMS is a major provider of information systems to the health care industry. Historically our focus has been on hospitals and large physician groups. We serve hospitals in the United States that account for between 15 and 20 percent of all admissions and outpatient visits.

Our perspective on health care is also influenced by our substantial experience internationally. We are the major supplier of information systems to the National Health Service in England and to health care organizations in Germany, Holland, Spain, and Ireland.

As explained in our written statement, we initiated in 1987 research into the development of a general data utility for the interchange of health care information among providers, payers, and other organizations. Operational testing of our concepts began 3 years ago in New England. More than 25 organizations—hospitals, physician groups, payer organizations, and others—have been assisting us in the testing of a comprehensive range of services, including the communication of enrollment, the verification of eligibility, care authorization, the support of concurrent review, claims transmission, and the communication of payment details.

We are now carrying out volume tests of our all-payer, online eligibility service. This will be the first service we introduce commercially. It works like the credit card authorization systems that we are all familiar with. In fact, we are utilizing in this service some of the same technology used in the financial services industry.

We still have much more research to carry out. But based on the work to date, and based on our experience in working for years in the health care industry, especially with hospitals and physician groups, we can draw some conclusions which I believe will be helpful to Congress; namely:

First, the development of general data utilities for the movement of health care information electronically among organizations is very practical. We can get, through electronic communication, the feel of a single or universal system similar to what you, Mr. Chairman, are very familiar with in the financial services industry and the banking industry, while preserving at the same time the advantages of a pluralistic system.



Second, community oriented databases can be developed as a by-product of the electronic interchange of information. Such databases can further enhance the provision of care and also facilitate greatly and improve the cost-effectiveness of health care research.

Third, as others here have noted today, most of the required technology is now available. These technologies, in large part, have been proven in other industries.

And fourth, our conclusion is that progress can be made even without standards. As you suggested earlier, Mr. Chairman, we can and we should move in steps. With today's technology, diverse computer systems employing different data formats can be linked together. Standards, however, will greatly simplify and speed up the move to electronic communication.

It is important, therefore, that standards activities be supported. In our view, we are just at the beginning of the standards process, and much more than just the standards of transaction formats must be dealt with. There must be agreement on the definitions of data, standards of performance, and business practices, because they will also greatly facilitate the process.

As others have testified, the potential cost savings here are large. People have talked in the tens of billions of dollars.

Improvements in the health care delivery system can also be made. It is critical, however, that these benefits be realized as quickly and as fully as possible.

Mr. Chairman, your committee has provided leadership in a number of other areas on the health care side. We believe you can take leadership in this area, and we would recommend the following.

We recommend that Congress appoint a commission, an advisory panel or group, to help create the environment that is necessary for the rapid introduction of information technology into the health care industry. Information technology is one of the few factors that can favorably impact health care costs and quality.

Its introduction into the health care industry to the level of its introduction today into the financial services and travel industries, will be a very big challenge. The health care industry is not only large, but it is highly fragmented, much more fragmented than other industries.

There also are a wide range of interests to be accommodated, one of the most important of which is the interest of individuals for privacy on matters of health care.

A commission would serve to focus and provide direction to development and encourage and stimulate all participants in the industry.

In our written statement, we have suggested a range of areas of activity for such a commission. We have also suggested the types of individuals that should be included on such a commission.

Our second recommendation is that Congress should provide funding to the Department of Health and Human Services to support demonstration projects and research into health care information technology. The model that we suggest for this funding is the funding currently being provided for outcomes management.

We believe that demonstration and testing is very important. It is also very expensive. And as a result, we feel that financial support from the Federal Government would be very positive.

Third, we recommend that Congress provide special funding to HCFA to allow HCFA to move aggressively on standards matters for both the Medicare and the Medicaid programs.

HCFA is now playing a very important role in the activities of the ANSI standard group as has been discussed by others, but it is very, very important that both the Medicare and the Medicaid programs be represented in all of the standards work that is going to develop, and there is going to be a lot of it.

As standards are adopted, it will be critical for the Medicaid and Medicare programs to be in a position to conform to them as quickly as possible, since health care providers, other payers, and information systems vendors such as us will be highly motivated by the actions of the Government programs.

The problems with the UB-82 were not so much with the fact that there was not common agreement, but that the implementation of the UB-82 came in many different varieties.

In conclusion, we are confident that the actions we are recommending here will encourage the health care industry to exploit rapidly the potential for information technology. The result will be much more efficient and effective health care administration. The dividend that can be realized from such improvements can help finance better access to care and, with a shift to electronic data interchange, the American health care delivery and financing systems will be much more responsive to changes in the needs of our society.

Thank you very much.

[The prepared statement follows:]

STATEMENT OF  
 FRED L. MOREFIELD, VICE PRESIDENT  
 SHARED MEDICAL SYSTEMS CORPORATION  
 BEFORE THE  
 SUBCOMMITTEE ON HEALTH  
 OF THE HOUSE WAYS AND MEANS COMMITTEE

Shared Medical Systems Corporation (SMS) greatly appreciates the opportunity to submit this statement on the potential for simplifying healthcare administration through the use of information technology. SMS, a publicly held company with revenues of \$435 million in 1991, is a leading provider of computer-based information services to hospitals and large physician groups in the United States and in five countries in Europe. Our systems support the administrative, financial, and clinical activities of our clients, at both the operational and strategic levels. We employ more than 4,000 individuals, half of whom are located at our headquarters outside of Philadelphia, Pennsylvania. At this location we operate a large data center which most of our U.S. clients use for a substantial portion of their information processing.

SMS' Healthcare Data Interchange Project

In 1987 SMS recognized that the shift in healthcare financing from fee for service to managed care and the concomitant introduction of pre-authorization and concurrent review requirements, were changing dramatically the needs of our clients for communication with other organizations. The volume of data that had to be communicated externally was expanding by one to two orders of magnitude. This communication was also much more time critical than communication in a fee for service situation. In addition, we noted that the nurses and physicians who were heavily involved in this communication were finding it very disruptive and frustrating to the patient care process. Finally, we realized that much of the information that our clients needed to communicate to others was already available in electronic form in their information systems. The question we asked ourselves was: could this information be communicated electronically?

We explored this possibly with a number of insurance companies, HMOs, Third Party Administrators, and Utilization Review firms and found that these organizations would benefit from the electronic receipt of this information. We learned, in addition, that much of the information that our clients needed from these other organizations was also in electronic form. This, plus the generally encouraging response we received, led us to broaden our inquiry and consider whether it would now be possible for us to initiate development of a more generalized approach, a data utility linking together providers, payors, and others involved in healthcare. The concept of an information system connecting together electronically the participants in an industry was certainly not original. Such systems have long been critical to other industries, especially the travel and financial services industries. Since the mid-1970's experts have felt that the healthcare industry could benefit from such an application of information technology. One of our considerations in 1987 focused on whether the industry was ready to embrace the concept of a system for the comprehensive electronic interchange of healthcare data. The other consideration was whether we, as an organization with a strong understanding of healthcare information issues and with significant operational relationships with the very complex provider-side of the



industry, could offer some of the needed leadership. While the highly pluralistic nature of the healthcare industry is certainly a great strength, many believe it has contributed to the industry's inability to effect broad, significant change without governmental intervention. Although SMS is small in relation to the overall healthcare industry, we felt that perhaps we could leverage our position and spark support from others who share our commitment to improving the quality and cost-effectiveness of healthcare.

During 1988 we studied the wide range of issues involved in electronic data interchange - technical, commercial, legal, and attitudinal - and searched for an appropriate setting in which we might carry out the extensive research and testing that we were certain would be needed. We found three New England hospitals (only one of which was a client of ours), who for some time had been informally discussing electronic communication among themselves. They reviewed our ideas and offered to help us assemble the range of organizations required for the research we were planning. We accepted. In January of 1989, we established the Data Interchange Services Division, a separate division within SMS, to progress this activity.

The initial group of parties required for testing was formed in early 1989 and the first electronic interchange of information (between a hospital and an HMO's utilization review unit) went into operation in the middle of that year. Now more than 25 organizations are assisting us with our testing. Included are hospitals, physician groups, a range of payor organizations, a claims clearinghouse, a peer review organization, a reference lab and a bank. The operational services being tested address enrollment communication, eligibility verification, care authorization, the support of concurrent review, claims transmission and the communication of payment details.

We are now carrying out volume testing of the all-payor, on-line Eligibility Service; this will be the first service we introduce commercially. It works like a credit card authorization system. In fact, we are utilizing the same technology that is used extensively by the financial services industry.

#### Conclusions Reached By SMS

We still have much more research to conduct. However, from our work on this project to date and from our experience over the years working in the healthcare industry (especially with hospitals and physician groups), we can draw some conclusions, which we believe will be helpful to Congress, namely:

- 1) The development of general data utilities for the movement of healthcare information electronically among organizations is practical. The transmission of the 4 billion claims generated in the industry annually represents only a part of the opportunity, and not the most important part. With the appropriately authorized electronic communication of clinical information among providers, care can be better coordinated, improving quality and saving much more than just administrative costs. With better communication at the front-end of the process - enrollment, eligibility, and authorization - many of the problems that plague the back-end billing process can be eliminated. In fact, the adjudication process can be made largely concurrent and be carried out on-line.

- 2) Community-oriented data bases can be developed as a byproduct of the electronic interchange of information. Such data bases can further enhance the provision of care and also facilitate and improve the cost effectiveness of healthcare research, including clinical trials, the assessment of technology, and the development of clinical guidelines. The national linkage of community healthcare data networks with large patient data bases is, in fact, viewed as fundamental to the process of Outcomes Management.<sup>1</sup>
- 3) Most of the required technology is now available. The technologies needed for communications, data security and confidentiality, and transaction switching have been proven in other industries. The only area where we have significant concerns is with data base technology in that the volume and complexity of healthcare information places considerable demands on data bases. Fortunately, data base technology is developing very rapidly. We believe that the price/performance of data base technology will continue to improve substantially and be adequate to meet the industry's needs as they grow.
- 4) Progress can be made even without standards. Standards are important, but we should not wait for them to be adopted. With today's technology, diverse computer systems employing different data formats can be linked together. Standards, however, will greatly simplify and speed up the move to electronic communication. It is very important, therefore, that standards activities be supported. Also, these standards activities must be broadened to include more than just standard transaction formats. Agreement on the definitions of data, standards of performance, and business practices will also facilitate the process. Comprehensive and more consistent ways of identification (of hospitals, insurance companies, benefit plans, etc.) are needed.

#### Recommendations

SMS believes that improvements in healthcare delivery as well as substantial savings can be achieved through the electronic interchange of healthcare information. For our society to realize these benefits as quickly and as fully as possible, we recommend that Congress take the following actions:

- 1) Congress should appoint a Commission to help create the environment necessary for the rapid introduction of information technology into the healthcare industry. Information technology is one of the few factors that can favorably impact healthcare costs and quality. Its introduction into the healthcare industry to a level equivalent to its current use in the financial services and travel industries will be a very big challenge. The healthcare industry is not only very large but also highly fragmented. There are also a wide range of interests to be accommodated, one of the most important of which

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<sup>1</sup> Ellwood, Paul M., Shattuck Lecture, The New England Journal of Medicine, June 9, 1988.

is the interest of individuals for privacy on matters of health status. A Commission would serve to focus and provide direction to development.

We would suggest that the Commission's activities include the following:

- o The assessment of which information technology has potential benefit to the healthcare industry. For example, should a standard machine-readable identification card be introduced for individuals? What security technology should be used for what types of data in what situations?
- o The stimulation and prioritization of standards development and implementation.
- o The recommendation of legislation and regulations that will facilitate the introduction of information technology and at the same time address the confidentiality and privacy issues of patients, care givers, and others.
- o The establishment of national goals for use by information systems organizations in their planning.
- o The monitoring of developments in information technology in healthcare and the regular reporting of progress to Congress and the public.

The Commission should be composed of nationally recognized individuals with expertise in healthcare delivery, healthcare financing, healthcare research, legal and consumer matters, information technology, and other related fields.

- 2) Congress should provide funding to the Department of Health and Human Services to support demonstration projects and research into healthcare information technology. A model for this is the funding currently being provided for Outcomes Management. As mentioned above, the exploitation of information technology is critical to Outcomes Management. These two areas should be coordinated.

Demonstration and testing is very important. Aspects of the approach that we at SMS are taking need much more testing. Other efforts are underway or planned. The Robert Wood Johnson Foundation has provided seed money for the New York State Single Payer Initiative and similar projects in other states. The Hartford Foundation has funded the development of specifications for a Community Health Management Information System for use by employer coalitions. Since experiments such as these are very expensive, financial support from the Federal Government is needed.

- 3) Congress should provide special funding to the Health Care Financing Administration (HCFA) to allow HCFA to move aggressively on standards matters, for both the Medicare and Medicaid programs. HCFA is now playing a very important



role in the activities of the American National Standards Institute's Insurance Subcommittee. The activities of this group are expanding, however. Furthermore, HCFA should be represented on other standards activities. And, finally, it is important that the Medicaid programs be represented appropriately in all standards work. As standards are adopted, it will be critical for the Medicare and Medicaid programs to be in a position to conform to them as quickly as possible, since healthcare providers, other payors, and the information systems vendors to these other parties will be highly motivated by the actions of the governmental programs.

#### Conclusions

We are confident that the actions we are recommending here will encourage the healthcare industry to exploit rapidly the potential of information technology. The result will be much more efficient and effective healthcare administration. The dividend that can be realized from such improvements can help finance better access to healthcare. And, with a shift to electronic data interchange, the American healthcare delivery and financing systems will be much more responsive to changes in the needs of our society.

Chairman STARK. Thank you.

Just to set the record straight, it was in 1987 that I asked HCFA to study the possibility of a uniform billing system for hospitals. I still have not seen that study yet, but I gather that it is sort of underway in a couple of States. If we all live long enough, we might see it.

And I have to disagree, Mr. Morefield, with you on one issue. There is nothing that politicians dislike more than a commission. A commission is a way to say: I do not want to do it, so let us appoint a commission.

Mr. MOREFIELD. OK.

Chairman STARK. I mean, what we are charged with—it would not seem very obvious by our behavior over the last year or so—is making decisions, and they are never perfect. That is why we get so much comment.

But sooner or later, if you are going to accommodate Travelers and you are going to accommodate Blue Cross and you are going to accommodate Medicaid and the State of New York and the State of California and everybody else, somebody is going to have to say: Wait a minute, guys, it is going to be this—not this or this, but, in our best judgment, and we are going to have to decide that without unanimity. We do not decide anything unanimously up here. We are lucky if we have a simple majority.

Commissions cannot do that. I mean, they do not get elected; they get appointed. They do not have to get reelected. So they are great for technical advice. But to come to closure, at some point somebody is going to have to have to say: Let us do it.

And it sounds silly, but, I mean, that is what happened to this UB-82. How many years ago was that? 1982. Now we are still futzing around trying to figure out whether there is some kind of uniform coding.

At some point, I guess you just have to risk a little bit and say: Let us do it.

Do you know that there are probably fewer parts in my body than there are in the new Cadillac Seville, which is an excellent car, I might say. I never thought that. I never thought that American cars were any good. It ain't bad.

But General Motors knows where every one of those parts is and whether it has to be replaced and how many are in my local Cadillac dealership in Freemont, CA. They do not know where my gallbladder is. Nobody knows, you know, except me, and I am not sure.

I mean, if you could keep track of car parts why not me? And I get a sense that you all know that we can do this. But it is going to take a lot of work, and it is not going to be inexpensive, and we have to get started.

I guess I would like to ask you a couple of questions. Do any of you see any reason not to use the Social Security number as a unique number?

Dr. KORPMAN. I think I have heard that discussed a half a dozen times already this morning. I think on an implementation basis, none of the systems with which I am familiar would have a technical problem using Social Security numbers.

There are problems in terms of the fact that some people have several.

Chairman STARK. Not too many.

Dr. KORPMAN. I mean, not even flagrantly, not to be abusive. Just some people have several. Some people cannot remember them, because nine digits is a fairly long number, and most of the other identification numbers people use are six or seven. They seem to be easier to remember.

But as a technical issue, there are not any—there also would not be any problem picking any other single number and making that work.

Chairman STARK. Well, I guess it would—does it cause a lot of problems in speed and cost if we have to match someplace this other unique number with the tax number, if we want to sort Medicaid records, for instance?

Does it not save us some money if we are just using one? Maybe not. Maybe you guys are so—your machines are so quick that—

Ms. LUSK. Well, technology is not an issue. But I think in supporting what Mr. Tresnowski said, there has been just a tremendous movement on the part of the Blues for everyone to adapt to the Social Security number, and all of the customers that we serve, I think the majority of them have migrated to that number, simply because it is there, and everybody uses it, children and all those—

Chairman STARK. I mean, I have no great brief for it, except that—what I would envision someday is doing away with the welfare aspect of impoverished folks having to go and beg for medical care. If you do not have enough money, your tax return should simply show it.

Dr. KORPMAN. I mean, there is one other positive point, which is it is externally applied. Right now, every institution assigns their own number to a patient. I am not familiar with any hospitals that use the Social Security number, because sometimes people show up without one, and you have to be able to do something.

We do enormous translation tables between the institutional number, sometimes between a different billing number for each episode of care, plus the Social Security number, the driver's license number, and any other identifiers that might be there.

A mandate to use this would solve a lot of those kinds of processing issues which impact all providers.

Chairman STARK. I guess I see our role—I am being overly cautious—maybe not overly cautious, but I am using as much caution as I can—to see us get a system started without prejudicing any of my colleagues' ideas of what the health payment system ought to look like by the end of the decade, whether it ought to be one universal system, whether it ought to be play-or-pay. Whichever system we have, it seems to me, is going to be easier to implement and save money if we have some kind of universal data system out there.

And so that puts a limitation on the extent of any legislation. Does anybody else—Mr. Morefield suggested some areas of legislation. HCFA does not seem to want the money, and I do not know that we want to just throw it at them. I am sure if they wanted the money, they would come and ask for it.

But are there any areas needing legislation that you see now? I see some points where the legislators will have to decide, if there



are competing or if there are a series of alternatives, we may have to choose between them. But is there anything right now that you wanted to suggest?

Dr. KORPMAN. Looking at where you can use legislation effectively—and I agree with all of your comments about a commission; by the time a commission was ready for action, it would be far too late to have action—there are two areas where legislation can be of great use.

One has been hinted at cautiously all day—impose a minimum subset of data and coding for at least the federally-funded programs. Just doing the Medicare and Medicaid would be enough to bring everybody else in line. Making rules for Medicare and ignoring Medicaid splits people and organizations in half, and that is a problem. But picking up the Medicare and Medicaid by whatever technical legislative ruse it takes to influence the States and saying: "These are the uniform data elements which you will gather," would be an enormous leap forward.

I agree with you that I do not think that the data elements which really cause the bulk of the problem, as the AHA pointed out, will come about from standards groups, even though we are all meeting and we all love each other. We can make communications standards; we can make EDI standards. We have already demonstrated that. But data standards are another matter.

Someone must just say "Use these standards." It almost does not matter which one—take HCFA and EDS; both organizations have been working on standards for so long—just pick a standard and say: This standard is it. That would go a long way towards making things better.

Is this a perfect solution? It is far from perfect. Is it better than 50 different ones? In every way.

The second useful legislation is that—and as a banker, you can appreciate this—the information infrastructure in health care is the worst of any information industry, without exception and by orders of magnitude.

Information infrastructure influencing reimbursement legislation—something more than accelerating payments by 2 days—I hate to come down to money, and I am a commercial person who will probably benefit from this, but that is unrelated to this issue—infrastructure legislation is needed that says: Hospitals, as you choose your capital dollars and the ways to spend them, and you are debating between expenditures on facilities, modalities, and information infrastructure, here are some benefits to you if you choose information infrastructure. Eventually the entire country will benefit from information infrastructure expenditures. I think this would be another legislative area of compelling worth that would have perceivable, dramatic cost and quality impacts, given a decade.

It is an infrastructure investment. It is like highways. You know, you are not going to see a lot tomorrow, but a decade from now, you would see an extraordinary amount.

Chairman STARK. I agree. And one of the problems is that we do not get budget scoring for that, just like I get no budget scoring for preventive procedures. We have vaccinated all of the kids in the

world, and OMB is not going to give me an prospective savings, because there is no requirement now to do it.

So, I mean, you only save in our game by what you do not spend that the law requires you to spend. It is a silly way to count beans.

Dr. KORPMAN. I will tell you one place where you could get immediate savings, since quantifying some of these benefits seems to be impossible.

Put the information infrastructure in place so that clinical data are available. Remember this is really about clinical data, not billing data. If you have the clinical data, the billing data drops out as an accidental byproduct. The utilization review data drops out automatically. I heard numbers here from \$25 to \$40 billion being spent on UR/QA and this data would all of a sudden be simply an incidental byproduct.

Those are budget savings that you can point to and say: We will not need the 4,000 UR clerks anymore, because UR will be concurrent, because you must have this clinical data, and it is being checked in real time.

We are doing those kinds of things right now in the systems we are putting in in New York City, and their data shows—

Chairman STARK. Do we not also move outcome research light-years ahead?

Dr. KORPMAN. Exactly.

Chairman STARK. Is that not also fallout?

Dr. KORPMAN. Outcome research is—right now, it is hopeless.

Chairman STARK. I mean, is the guy alive? You look it up, punch it into the computer; you know whether he has croaked or not. Five years later, and you look and you say he had this procedure or she had that procedure, and they lived. I mean—

Dr. KORPMAN. We are fooling ourselves if we think we can do outcomes research with the data we have right now. I have spent some time with AHCPR trying to cheer them on, because outcomes research is the right thing to do. But their real problem now is, yes, you can do a study with 200 people, and that is somewhat interesting. But to get the real data on many patients, you cannot do it.

Chairman STARK. And it seems to me, it is there. I mean, TRW knows more about—you know, I can get an eight-page printout about my bad credit practices online.

Dr. KORPMAN. Remember, a third of a physician's time and half of a nurse's time is spent jotting all this stuff down. And I am a physician, and I suffer with this in other venues.

You know, your record of care is this inch and a half of paper. There are ten tabs in there. And all you know for sure is that into any tab at any time someone may or may not have put a new piece of information. And your life depends on that. And all this abstracted data depends on somebody rummaging through this mess of paper and pretending that they can find something useful. And it does not really happen. You fool yourself if you think it does.

People survive because human protoplasm is good, not because the health care system is accurate.

Chairman STARK. Well, I look forward to working with you and your companies. As I say, I just have this sense—it is a sixth sense,

I guess—that we are so close to being able to simplify the system. The technology is there.

Change is a frightening prospect to many people, as I said earlier—for Members of Congress, we are not going to let go of our perks; my mom is not going to join an HMO. I mean, there are certain givens in this world. And somehow I think a little gentle nudging is required to let the hospital people and the doctors know that computer nerds are not such bad folks.

Dr. KORPMAN. You are right. As you noticed in our printed testimony—maybe you did not—one of my favorite expressions is that people love innovation, but they hate change.

Chairman STARK. That is right.

Dr. KORPMAN. And making the transition from innovation to change is an area where a nudge is of extraordinary help.

Chairman STARK. Read Morrison's biography of his father-in-law, Admiral Whomever, in the First World War, continue the same gunfire and the problems he had getting that into the minds of people. It is a good case on how you have to sell innovation.

I want to thank the panel. I look forward to working with you. As I say, I'd like to do the more specific things that we can do. I am looking for a legislative hook, because I suspect that if we pass a bill, maybe the President will sign it.

Dr. Sullivan has indicated that we ought to do it. I am going to take him at his word and say: OK, let us go.

Maybe all we have to do is establish a time limit for administrative changes and say that if they do not come up with an alternative, we will do x or y by next year, and then you can put all your nerds and gnomes and geniuses to work and come up with a system that will help us.

Thanks very much for your participation.

Dr. KORPMAN. Thank you.

Ms. LUSK. Thank you.

[Whereupon, at 1:15 p.m., the hearing was adjourned.]

[Submissions for the record follow:]



**Statement of Lee B. Spingelt, CPAM, President, and Dennis E. Smeage, Executive Director,  
American Guild of Patient Account Management**

The American Guild of Patient Account Management (AGPAM) respectfully submits its comments to the Chairman and Members of the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, regarding administrative simplification in health care.

The American Guild of Patient Account Management is a national membership association that represents more than 4,200 patient account managers in hospitals, medical clinics and physicians offices throughout the United States.

Typically, these health care professionals are in charge of business office operations and are responsible for admitting, insurance verification, financial counseling, outpatient registration, insurance billing (including Medicare and Medicaid), accounts receivable and collections.

No other group of health care professionals has been so affected, and so frustrated, by the increasing complexity of and inconsistency in reimbursement regulations and procedures. Almost daily, patient account managers are faced with having to readjust their business office systems to accommodate the changes, conflicting requirements and burdensome regulations prescribed by federal, state and private payers. These comments are intended as suggestions for possible reforms in the present reimbursement system and are based on the collective experience of our association's members. We respectfully request your consideration of these suggested reforms.

**SUGGESTED REFORMS**

**Require the use of uniform billing forms.**

1. Limit standard forms to existing UB-92, HCFA 1500 and "superbill". Ideally these three would be combined, allowing all services to be billed on one document, thus reducing form, storage and handling costs.
2. Maintain the current system for reimbursement form review and development using the National Uniform Billing Committee (NUBC). This committee reviews and approves changes to the uniform billing form and has developed a network throughout the country to maintain instructional manuals and to provide industry education on use of the form.
  - a. Expand the NUBC to oversee all billing forms.
  - b. Make the NUBC's decisions applicable to all carriers and providers.
  - c. Expand the committee membership, which has been limited to its original members, to include other groups (such as AGPAM) that have direct knowledge of the impact of the committee's decisions.
3. Require universal acceptance by all payers of the standard billing forms. Numerous carriers do not accept the standard forms. Universal acceptance must apply to Medicare, Medicaid, state industrial insurance, Champus, professional review organizations, Blue Cross/Blue Shield, private insurance and carriers, union trusts, as well as all other payers.
4. Require general acceptance of the coding tables that support the uniform billing forms. Carriers may accept the standard form but require "custom" codes for specific diagnosis, procedures or other data elements. Standardized treatment of non-covered services is essential.
5. Require standardized use of the fields within the uniform forms. The uniform billing manual identifies a specific field for a specific data element. An individual insurance carrier may, however, require unique data compared to that required by other carriers. This requires specialized programming or manual exceptions which

leads to errors and requires multiple processing of claims by both payers and providers. In the current environment, there are significant numbers of such variances.

**Require all carriers and providers to develop and agree on uniform definitions of common terms.** An example of this problem is the lack of universally accepted definitions of "inpatient" and "outpatient."

**Hold insurance companies responsible for the complexity of their own systems.**

1. Insurance carriers must better educate employers and employees about their insurance requirements and programs. For example: One area of the country has two companies marketing medical insurance coverage. Company #1 offers four separate programs (each program offering a wide range of benefit plans). For one of these programs, it has contracted through company #2's network of providers. However, company #2 claims are processed through one of 26 administrative agencies, depending on the subscriber's employer. Even reasonably intelligent subscribers have difficulty understanding this intricate maze. Carriers must assist both subscribers and providers in accessing the proper network.
2. Often patients do not understand that they must use specific providers in order to receive full insurance benefits.
3. The use of a standard, industry-wide insurance card which is read electronically and which includes all service and billing requirements would be a major healthcare system improvement.
4. When program changes occur, carriers should immediately issue new insurance identification cards to subscribers. Insurance companies often issue cards long after program changes are implemented. This leads to delays in preauthorizations and reimbursements.
5. Insurance carriers must be responsible for directing claims efficiently and in a timely manner to their separate networks. Currently, the provider and subscriber are held responsible. Typically, when a division within the insurance company denies coverage and returns a claim, the subscriber or provider are left to research the proper billing network. Carriers should maintain a subscriber database of their affiliated organizations and be required to forward claims when appropriate.
6. Approximately 10% of patients do not carry their insurance cards or carry an outdated card. Carriers should maintain an electronic data base for verification which is accessible to providers 24 hours a day. One insurance verifier at a hospital estimates she spends 8% of her day on hold and listening to busy signals when telephoning insurance carriers for verification of coverage.

**Establish standards for uniform billing form attachments.**

1. Detailed bills are required by many carriers along with uniform billing forms. These bills are expensive to provide and their preparation requires additional staff and equipment time. Some carriers, such as Medicare, are able to process claims without a detailed bill (which may be 30 or more pages long).
2. Requests for other records (including x-rays, patient photographs etc.) are common and are provided in enormous volumes. (A 244 bed acute care hospital produces 2,400 pages of medical record attachments per month). This is a very costly practice and of questionable value. As an alternative, limited retrospective audits would provide pertinent information and would be more cost effective to both providers and carriers.

**Limit billing program changes and allow sufficient lead time for providers to respond.**

1. Medicare and other carrier program changes arrive in patient accounting offices almost daily. Many times only a few weeks elapse before implementation of a program change. Occasionally the change is retroactive.
2. Uniformity in implementation dates of approved changes is imperative. Under the present system, implementation of new criteria by carriers such as Medicare is arbitrary. The date of change often varies among carriers, and non-compliance by some carriers leads to confusion and unnecessary rejection of claims.

**Timely insurance payments should be an industry standard.**

1. A method of enforcement should be implemented for standard claims payment windows.
2. Claims payment performance should be published and made available to employers and providers.
3. Specific payment practices should be prohibited.
  - a. Insurance companies and their agents should not offer faster than standard payment in order to solicit a discount from a provider. An insurance company has a contractual responsibility to pay promptly. Offering faster payment for a discount is an abuse of the system.
  - b. Insurance companies and their agents should not request discounts in lieu of performing a patient account audit. If standards dictate the need for an audit, the account should be audited.

**Require standardized electronic interaction among carriers and providers.**

1. Establishment of a national standard for format and protocol of electronic claims submission is critical. Due to the number of existing protocols, providers must purchase and maintain multiple computer hardware and software systems. This increases capital and training costs and becomes prohibitive for small hospitals and physicians.
2. Electronic, tape and paper billing requirements should be standardized.
3. An electronic refund system should be established allowing providers to efficiently reimburse carrier overpayment. The carrier "take back" approach should be abandoned except for disputed claims.
4. A standardized remittance advice should be required.
  - a. Standards have been developed for electronic remittances and are just now being implemented within the healthcare industry. Variations should not be allowed.
  - b. Paper remittances should be standardized for efficient processing. Currently, the large volume of small payments makes it impractical to process them electronically.
5. The costs of electronic billing should be borne by the parties receiving the greatest advantage.
  - a. Most providers must invest in additional staff and equipment to produce electronic claims. Chief advantages include accurate claims production and



improved cash flow.

- b. Most carriers also buy additional hardware and software but have the advantage of receiving more accurate data and eliminating rooms full of data input personnel.
- c. The costs of clearinghouses should be borne by the carriers. Per claim charges to providers is a deterrent to expansion into EMC by providers.

**Require all carriers to accept assignment and to accept an electronic or paper notation that an assignment is on file.** Audits should determine if a provider abuses this protocol.

**Clear industry standards should be developed for carriers to handle coordination of benefits.** The current complexity of contracting arrangements between carriers, providers, and secondary payers results in substantial numbers of payment errors. This requires additional provider resources to monitor and correct.

**Establish a universal carrier agreement regarding the data necessary to develop third party liability claims.** Carriers require proof that third party liability does not exist. This should be the responsibility of the carrier, not the provider of medical services.

**Standardize audit procedures that apply to all payers in order to simplify audits and avoid conflicting compliance instructions.** Key benefits of a standardized system include improved chart documentation and fewer problems in training staff and physicians.

The American Guild of Patient Account Management (AGPAM) commends the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, for its attention to the issue of administrative simplification and pledges its support of the Subcommittee's efforts to control the spiraling costs of health care.

STATEMENT  
of the  
AMERICAN MEDICAL ASSOCIATION  
to the  
SUBCOMMITTEE ON HEALTH  
COMMITTEE ON WAYS AND MEANS  
U.S. HOUSE OF REPRESENTATIVES  
"Options for Health Insurance:  
Administrative Simplification in Health Care"

Statement for the April 2 Hearing Record

One of the key elements of the American Medical Association (AMA) plan for health care reform -- Health Access America -- is the reduction of administrative costs in our health care system. Administrative inefficiencies drive up the cost of health care and make the health insurance system far too burdensome for providers and patients. This problem needs to be addressed if successful reform of the health care system is to be achieved. The AMA has developed specific proposals for reducing administrative costs and bureaucratic burdens in the health insurance system.

We also have some related concerns:

- While much is being said about moving to electronic claims processing, too little attention has been given to patient confidentiality. As physicians, we must make sure that this issue is given full consideration.
- While the expanded use of electronic claims processing is necessary, and the AMA will help promote its use among physicians, we cannot support a mandate that all providers file all claims electronically.
- We hope that any discussion of administrative savings in the health care system will be based on the assumption that such savings will be used to increase health care access.

Simplifying the Insurance Claims Process

We need to eliminate the excessive, complicated, and costly nightmare of often duplicative paperwork that physicians and patients have to face on a virtually daily basis. Far too many resources in physicians' offices are being used to meet the different demands of the variety of insurance companies and self-insured entities, as well as public health programs, that physicians must deal with to receive reimbursement for their services.

The AMA appreciates having been asked to be involved in recent meetings of insurance companies and others interested in reducing administrative waste under the leadership of Department of Health and Human Services Secretary Sullivan. We are confident that the cooperation demonstrated by those involved will help bring levels of standardization to the insurance claims process and help accelerate other efforts to reduce administrative waste. The AMA is now involved in the various working groups that have been set up to examine the issues surrounding electronic claims processing as a result of Secretary Sullivan's initiative. We look forward to their recommendations.

Like others concerned about administrative waste in the insurance claims process, the AMA is calling for standardization to help alleviate this expensive burden. First, we would support federal mandates that all

insurers and self-insurers use a uniform claims form. Such a form already exists -- the HCFA 1500 form, which was developed in cooperation with the AMA and is used for the over 500 million Medicare claims for physician services. Requiring the use of one claims form would be a simple, easily achieved first step in limiting the administrative burdens of the claims process.

The AMA also believes that a standardized format for electronic claims needs to be developed and is fully involved in bringing this idea to reality. The widespread use of electronic claims processing is both necessary and inevitable. The AMA is committed to encouraging its use among physicians. However, the AMA cannot support its mandated use. Too many physicians across the country do not have the resources to provide this level of electronic capability. Such a mandate will directly impact the ability of many physicians in poor, underserved areas to continue to provide care.

Physicians are also concerned with the implications of a mandated system on payment policy. A universal system required to be used by all third-party payors should be developed only with public and physician negotiation and involvement. This involvement is essential to address issues such as delays in payment that impact the ability of physicians to provide care. Rather than mandate a system, the best way to involve physicians in the movement towards an electronic claims process is through incentives. While the lessening of administrative burdens is an attraction in and of itself, the promise of quick payment is another tool to encourage system-wide use of electronic claims processing. For example, claims filed electronically could be paid electronically. We urge that any implementation plan use the incentive approach to ensure that providers will choose to participate as quickly as they are able.

#### Patient Confidentiality

One of the unexpected benefits of the current paper-based claims processing system is its protection of patient confidentiality. While there is some disagreement on the extent paper records help to maintain confidentiality, it is a fact that difficulties caused by moving around information by paper make the risk of a patient's medical information being misused relatively small.

Several national and international groups are developing standards for health care data definitions and the linking of health care data. What must accompany these efforts, whether through legislation or regulation, is the development of adequate safeguards of patient rights concerning the accuracy of personal information and the extent to which it is shared with others.

A key element in the success of health care delivery is patient confidentiality. At a time when there is a widely accepted need for reform in the insurance industry to allow more people to be covered so that health risks can be spread adequately, personal information must not be allowed to be used to limit that risk unfairly. Without protections of confidentiality in the patient/physician relationship, many people in need of care will be far less willing to seek that care. We are seeing how this is especially true for people with AIDS. People need to know that they can seek medical care with confidentiality. Any electronic claims process needs to assure that confidentiality.

#### Conclusion

The AMA is fully supportive of efforts to bring about widespread use of electronic processing of insurance claims. Physicians are set to embrace a system that provides a quick and easy way to process insurance claims. We will continue to cooperate in the efforts to bring this idea to reality and help bring about significant savings within the health care system with the hope that such savings can be used to increase access to care for those who need it.



STATEMENT OF THE AMERICAN ORTHOTIC AND PROSTHETIC ASSOCIATION  
TO THE SUBCOMMITTEE ON HEALTH, COMMITTEE ON WAYS AND MEANS  
REGARDING OPTIONS FOR HEALTH INSURANCE: ADMINISTRATIVE  
SIMPLIFICATION IN HEALTH CARE

April 2, 1992

INTRODUCTION

The American Orthotic and Prosthetic Association (AOPA) is the national membership organization representing the approximately 1,300 facilities that provide orthotic and prosthetic (O&P) patient services to the physically challenged throughout the United States. Practitioners employed by AOPA members design and fit orthoses (braces) and prostheses (artificial limbs) that enable these physically challenged individuals to overcome often serious and crippling injuries and return to productive lives. AOPA supports the initiative taken by Congress to focus national attention on the need for administrative simplification in our health care system. AOPA shares the Congress' vision of administrative simplification and cost containment and appreciates this opportunity to comment on how present-day technology might help us achieve our mutual goal.

I. THE USE OF STANDARD HEALTH INSURANCE CARDS BY ALL INSURERS  
AND PAYERS, WHICH CAN BE READ ELECTRONICALLY

The organized field of O&P supports the implementation of any measures that would serve to facilitate billing and claims processing and reduce unnecessary paperwork. The ability to conduct eligibility verification, billing, claims adjudication, and payment electronically through the use of standard health insurance cards by all insurers and payers would effectively eliminate the confusion and paperwork associated with these procedures. A standard health insurance card would enable the provider to know whether or not the cost of care will be covered. Such a card would also allow the the patient to know whether the service sought is covered and what their financial responsibility will be relative to that service. Therefore, the O&P field urges Congress to approve the use of standard health insurance cards.

II. CREATION OF ELECTRONIC BILLINGS SYSTEMS BASED ON STANDARD  
BILL FORMATS AND STANDARD CODING OF DIAGNOSES AND PROCEDURES

It is the position of the O&P field that the standardization of electronic billing systems, including bill formats and standard coding of diagnoses and procedures, would result in new claims processing proficiencies and would enable the O&P practitioner to provide quality health care by focusing on the patient rather than the billing process.

### III. ELECTRONIC VERIFICATION OF ELIGIBILITY AND BENEFITS

While we support the utilization of technology that would facilitate the ability of providers to verify eligibility and benefits by electronic means, it is the unfortunate fact that a majority of O&P providers do not have access to this technology at present. With the exception of a small number of member companies, the majority of O&P facilities can be characterized as "Mom and Pop" operations. These operations oftentimes do not have the means or the sophistication to take advantage of some of the existing technology that would enable O&P providers benefit from electronic billings systems or electronic verification.

### IV. USE OF REGIONAL CLAIMS CLEARINGHOUSES

The Health Care Financing Administration (HCFA) has already recognized the benefits of a reduced number of regional carriers in both the Intermediary and Carrier communities to address provider concerns about inappropriate and inconsistent coverage decisions and provide efficiency in operations. This method was implemented in the parenteral and enteral nutrition (PEN) and home care areas in the mid-1980's and has proved useful in achieving consistency in coverage decisions, operational efficiency and cost-effectiveness. Recently, HCFA has established a special task force to develop national policy relative to the implementation of a reduced number of carriers to process durable medical equipment (DME) and O&P claims. AOPA supports this development and urges Congress' support in this endeavor.

### V. ELECTRONIC FUNDS TRANSFER

AOPA supports the use of electronic funds transfer technology as a means of expediting the payment process. However, as noted above, a substantial number of O&P providers are not sufficiently automated to benefit from this technology at present.

### VI. DEVELOPMENT OF STANDARDS FOR AUDITS AND SCREENS APPLIED TO BILLS BY ALL INSURERS AND PUBLIC PAYERS

We support the development of standards for audits and screens relative to O&P provided the O&P field is afforded the opportunity to have input in the process.

### VII. CONCLUSION

The O&P field supports the concept of administrative simplification in health care and stands willing to work with the Congress to achieve this goal.

## TESTIMONY OF THE

## HEALTHCARE FINANCIAL MANAGEMENT ASSOCIATION

The Healthcare Financial Management Association (HFMA), on behalf of its more than 29,000 members, appreciates the opportunity to submit this statement on the potential for simplifying the administration of healthcare claims and patient accounting. We applaud the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, and its chairman for considering and highlighting this crucial issue.

HFMA is a professional association that is in a unique position to respond to the concerns of this subcommittee. HFMA's membership includes financial managers of both healthcare providers and payers. Many of HFMA's members are also directly involved in the claims administration/patient accounting processes for payers and providers, and as fiscal intermediaries or carriers for government healthcare programs such as Medicare.

HFMA has long sought uniformity and simplicity in the administration of patient accounting and claims processing. HFMA belonged to the original group of payers and providers that initiated the uniform billing process in the 1970s, as well as the original group that initiated the Insurance Subcommittee of the American National Standards Institute's X12 Accredited Standards Committee.

POSITION

HFMA agrees with Chairman Stark that the administrative costs of health care should be discussed before any major resolution of the current debate on national healthcare reform takes place. Any resolutions to healthcare administrative issues, however, must allow for the correct payment of healthcare services, including recognition of the costs of the administrative processes for both the payer and the provider.

HFMA believes that all parties attempting to reduce many of the administrative costs discussed must recognize that implementation of resolutions is not without cost. To control this cost, all parties must agree on the need for a national consensus, timetable, and budget to accomplish a final resolution. Neither healthcare payers nor providers are in a financial position to resolve the problems surrounding the administration of claims and other functions in the patient accounting process in the short term.

Finally, HFMA does not believe that the reduction of these administrative costs should be legislated. Rather, HFMA favors establishing a consortium made up of healthcare providers and payers, including Federal programs such as Medicare, Medicaid, and the Civilian Health Bureau of Indian Affairs and Medical Program of the Uniformed Services (CHAMPUS). Such a consortium should work to adopt uniform healthcare standards for the administration of claims and other associated activities. Such a consortium could be developed from a base such as the National Uniform Billing Committee, a group that has been in existence for many years. This group would need to be expanded, however, to include all critical parties involved in administration of healthcare.



Congress should ensure that Federal health programs actively contribute to a national consensus on standards and uniformity in all programs. Such participation includes the potential restriction of Federal program administration and legislation processes to promote efficiency, effectiveness and uniformity. Congress also should ensure that any future legislation includes consideration of its impact on healthcare administration.

#### PRESENT SITUATION

##### The Uniform Bill

The healthcare industry's billing process is hampered by a lack of uniformity and inadequate funding for processing. While HFMA is proud of its efforts toward establishing a uniform bill, and while it took almost 15 years for the industry to adopt such a form (the UB-82), use of the UB-82 is neither uniform, nor is the submission of claims information limited to this paper form.

The Health Care Financing Administration (HCFA), in addition to using the UB-82 (also known as the HCFA 1450) for Medicare Part A claims and some Part B claims, also uses the HCFA 1500 form for physician and ambulatory billing. Other healthcare payers accept forms other than or in addition to the UB-82 because:

1. Usually, the form cannot accommodate all the required information;
2. The data supplied on the UB-82 does not meet managed care data requirements or healthcare sponsor data requirements (healthcare sponsors are those organizations that purchase or fund healthcare benefits and include employers, government agencies or bodies, unions and others); and
3. The payer is not among those that are party to the UB-82 agreement and is not subject to a state mandate requiring the use of the UB-82 (for example, ERISA plans).

A number of payers also use the UB-82 in electronic form. Use of these transmissions vary by payer, and the National Uniform Billing Committee does not have authority over the UB-82. Finally, some providers send their data to a value-added network (VAN), a group that translates the provider data into the format required by individual payers.

The UB-82 recently has been revised into a new format, the UB-92. Except for slightly more flexibility, the new form does not resolve the data set limitations previously noted. Given that providers' economic health relies on the prompt payment of claims, providers will continue to respond to payer demands for additional data in different formats.

##### Other Standard Data Forms

As noted above, HCFA uses its form 1500 for much of its Part B billing, and other payers are beginning to use it as well. While most of the data on the 1500 is also contained on the UB-82, the provider and payers that adopted the 1500 are, to some degree, different than those involved with the UB-82.

### Electronic Billing

Electronic billing has been in use for years, but electronic claims filing is defined differently by individual providers and payers. For some, electronic transmissions might be by magnetic tape or facsimile. Most electronic processing done over telephone lines is in batch mode and limited by the hardware of the two parties. However, even though electronic formats of the UB-82 and the HCFA 1500 have been adopted, these formats vary by payer. Also, since the attachments have not been standardized, requests for any attachment automatically forces the payer to revert to a paper format.

### Other transactions

Besides processing significant amounts of data for claims, healthcare providers, payers, and sponsors also exchange many other types of data. Much of this data exchange is not conducted via computers, and there are considerable limitations on what kinds of data can be exchanged and the reliability of the data. Among the types of data typically exchanged are:

- o Enrollment Data: Data exchanged between sponsors of healthcare benefits and the insurer, payer, or third-party administrator (TPA) of the insurance plan. Typically this data is not exchanged on a timely basis, meaning that the ability to determine eligibility and benefits is limited at the time the patient seeks services.
- o Eligibility, Certification, and Authorization Data: Data exchanged between payers and providers to determine if the patient is covered and for what services or benefits. Much of this data is exchanged by telephone, facsimile machine, or mail. Payers will not usually guarantee the reliability of this data, although providers determine admission criteria, funding, and a number of financial and medical decisions based on this data. Under managed care, certification and authorization data may be exchanged several times during an episode of care, because a utilization review or quality assurance process may be underway.
- o Inquiry Data: Data shared by the parties to add to previous data already sent or to inquire into the status of the transaction.
- o Payment Data: Information related to a payment, usually from payer to provider; however, credits could travel in the opposite direction. In some cases, this may be information that is typed on a check or submitted with a check. In other cases, it may be a paper or "electronic" report sent separately. Often the amount of information sent is inadequate to allow proper posting and/or secondary billing of another payer for the balance.

Note that these transactions are not specific to health care. However, the amount of data and the inconsistency of data in health care does create special problems that are not usually encountered in other industries.

### ELECTRONIC DATA INTERCHANGE

Since 1989, healthcare payers and providers concerned about the problems and limitations noted above have been working under the auspices of the American National

Standards Institute's Accredited Standards Committee X12. In the X12's Insurance Committee (also known as the X12N), these voluntary leaders have or are in the process of developing EDI standards for healthcare transactions that would allow for the immediate electronic transmission (via telephone lines) of large amounts of data. The X12N has been hampered by the lack of adequate representation of payers and providers in the group establishing the standards, the absence of one industry group to uniformly control the codes necessary to run transactions through a EDI standard transmission, and the lack of recognition of all the business needs for the various transactions.

Despite this delay, the X12N has made progress and presents a real opportunity for the healthcare industry to enter into a truly electronic age that will allow for all the benefits of electronic transmission. The X12N has established an electronic remittance advice/payment known as the X12.835. This standard is being implemented by a number of payers and VANs. Among the payers considering the X12.835 is HCFA, which recently piloted the EDI process with four of its fiscal intermediaries. Since HCFA was not involved in the original design of the X12.835, members of the X12N and HCFA have been working together to revise the national standard to include Medicare. HFMA hopes that with HCFA's on-going cooperation the Administration will be deeply involved with the development of all future standards. Even though HCFA may not be in a position to immediately implement a particular standard, it is very important to the industry that HCFA's business needs be incorporated into all healthcare-related standards. That way, HCFA will be able to implement national standards (as opposed to standards specific to HCFA) in the future.

The X12.835 allows the transfer of not only EDI data but also EFT (electronic funds transfer). Together, the EDI/EFT process allows for a complete set of data to be sent with payment, electronic posting, and elimination of some reconciliation steps. HFMA, as part of its ongoing efforts to educate and promote EDI concepts, has published the first implementation manual for the X12.835.

In addition to the X12.835, the ANSI X12 has also completed a standard for enrolling individuals in various healthcare and other insurance programs. The enrollment standard X12.834 will allow sponsors such as employers, government agencies, and unions to enroll and update information on their clients and employees. Such a standard will allow for more complete and accurate data than what is now available. The X12N is working on the follow-up to the X12.834, namely electronic transmission of eligibility, certification, authorization, and utilization review data.

A claims data standard is also being finalized that will permit EDI processing of much of the data currently being submitted on the UB-82, HCFA 1500, and other standard forms. The form was expanded to include attachment forms. HFMA is anxious to see this transmission standard. We are confident that the inclusion of attachment forms will greatly improve electronic claims processing. The standard will be finalized soon.

What the X12N, on its own, has not been able to accomplish is a way for all healthcare parties to use the standards in a manner that will benefit the industry through improved data and cash flow movement while improving quality and, therefore, efficiency.



### Medicare and Medicaid

Since their inception in 1966, Medicare and Medicaid have had a significant impact on the direction and organization of claims administration. Changes made to these two programs set the standard for many other healthcare payers and some providers.

The Medicare program is separated into Part A and Part B. For many years, those who provided healthcare services usually related to one program and one contractor (fiscal intermediary or carrier). In recent years, however, many provider business services contract with both programs and, in turn, may deal with several fiscal intermediaries and carriers.

The procedures the Part A and Part B programs follow are significantly different, even though both programs collect essentially the same data and deal with the same beneficiaries. The division between Part A and Part B means that, in attempting to move toward uniformity, outside parties must also deal with both parts of the Medicare program. The frustration with this system is shared by HCFA staff, since those in Part A are not in a position to represent Part B.

In addition to the division of functions within the Medicare program, there is also the additional problem of administrative funding. Over the last several years, HCFA's budget and, therefore, the budgets of its contractors, have been seriously underfunded. Part of the problem is obviously the duplication of efforts between Part A and Part B. In addition, underfunded HCFA departments and contractors have had fewer resources to administer an ever-increasing regulatory burden brought on by the Medicare legislation of the late 1980s and early 1990s.

Every time additional Medicare legislation is passed, HCFA is forced to apply for additional funds from Congress and contingency fees from the Office of Management and Budget. Recent reports from the HHS Office of the Inspector General and the General Accounting Office have shown that HCFA and its contractors are ill-equipped to handle all the regulations that Congress has authorized.

The Medicaid program also has a number of significant organizational burdens that HCFA and healthcare providers must bear. Each state also has its own Medicaid claims processing system. Providers who operate in more than one state are forced to contend with each system on a different basis. In addition to the burden this places on the healthcare provider, the Federal government funds each of these unique MIS or MMIS systems at significant cost to the taxpayer.

Federal programs such as CHAMPUS also duplicate Medicare program administrative procedures. Although this duplication is somewhat beneficial to the provider, the duplication of costs to the Federal government on the whole is questionable.

### ISSUES

HFMA recommends that the following issues be considered by both the subcommittee and the healthcare industry as they examine the impact of administrative burdens on health care:

- A. There is no one standard format used for healthcare billing, and the only available "uniform bill" is not used consistently.

The use of multiple forms prohibits the exchange of data between payers and providers because their respective data formats may not be compatible. Also, any additional requests for data by payers means providers have to resort to using paper forms.

Even though the UB-82 is considered a uniform bill, every payer who uses the form requires a different set of information. In some areas of the country, providers are faced with more than 200 ways to complete the form. Not only does this create considerable duplication of computer programming, it also increases training expenses and raises the probability for errors.

- B. Despite the move toward electronic processing, any time a payer requests additional information that is not on the electronic form, the provider has to submit a paper claim.
- C. Most electronic systems used to prepare and adjudicate claims are antiquated. When these systems were created in the early 1980s, they were created for inpatient billing. Since then, however, the distribution of health care has changed dramatically; a considerable amount of care is now provided in outpatient settings and follows some form of managed care. Therefore, many providers and payers who have these earlier systems will incur large expenses when changes are finally made to update their systems.

Even though many improvements have been made to the systems used to process and exchange data, conversions to benefit from this technology will be expensive. Long term advantages will only occur when all parties invest in this technology. Along with efforts already underway to bring electronic data interchange or interface (EDI) online, new ways of linking internal and/or multiple data bases at a single site are also being developed. At this time, no single data base used by healthcare providers can supply all the data required by all payers.

- D. Increasing demand for more data has been an on-going burden for most providers and many payers. The burden has been exacerbated by the availability of electronic processing. Additionally, some of this required data is not even used for claims processing; rather, it is used to analyze accident prevention, create statistical cost comparison studies, and prepare other reports.

Demands for this data often come from healthcare sponsors, including the government, that do not acknowledge the extra cost to the provider, or from healthcare claims administrators and insurers that use the data to prove they are more effective or cost-efficient than their competitors. The provider is left with the choice of either providing the additional data or facing a refusal or delay in claims payment. In short, the provider is given no choice in

providing growing amounts of data at burgeoning cost compensation for their additional expenses.

#### RECOMMENDATIONS

In consideration of the present healthcare situation, the issues we have raised, and the reforms proposed in the Subcommittee's Press Release No. 25, dated March 17, 1992, HFMA has seven recommendations for the subcommittee:

1. HFMA agrees with most of the reforms proposed by the subcommittee. We believe that to fully implement such reforms, Congress should not implement more legislation, but support the creation of a committee of healthcare professionals who would govern all claims processing and patient accounting activities. Such a group would establish standards to govern electronic processing through the ANSI X12 standards process and oversee all other aspects of claims processing that do not belong within the X12. This committee would also be charged with implementing some of the reforms requested by the subcommittee. Existing groups, such as the National Uniform Billing Committee, could serve as a basis for the new committee, but membership would need to be expanded to include all critical parties involved in healthcare administration.
2. Congress should require all Federal health programs to participate in the ANSI X12 EDI process and in the newly formed industry committee. Congress should also review all future legislation to ensure that it does not impede the development of national standards. In situations where barriers exist, time, effort, and funds must be allocated to the industry to make changes efficiently and effectively.
3. Congress should work with the Administration to revise the various healthcare programs to take advantage of EDI and uniform processing. Such revisions would include requiring all Medicare claims and payments to be processed in one format; eliminating Part A and Part B processing differences; incorporating uniform standards into all ERISA plans; establishing standards for all government contractors; and funding the conversion of all Federal programs to the same standards as other payers.
4. The subcommittee should not consider establishing any national or regional VAN (such as regional eligibility data banks or regional claims processors) for any payer until:
  - a) the technology exists and is in place for all affected payers and providers, and they can effectively participate in the project, and
  - b) the industry committee requests such action from Congress.
5. Recognizing that it will take time and financial investment for the healthcare industry to implement uniform electronic standards, HFMA



recommends that Congress consider either direct or indirect funding to help providers and some small payers convert to electronic systems and participate in EDI transmission. This seed money will not only enable the country to convert its heavily burdened healthcare system to an electronic technology guaranteed to minimize administrative costs, but will also signify that Congress acknowledges that there is a need to reduce these costs.

6. Congress should encourage healthcare industry professionals to consider creating a partnership between payers and providers to ensure that administrative costs are kept in check and to continuously review the requirements for and the processing of all data transferred among the various participants in the healthcare industry, including data from the patients themselves.

HFMA hopes this testimony and recommendations will be accepted by the subcommittee in the spirit of partnership necessary to bring about electronic processing and data interchange. HFMA realizes that beyond the administrative burden of claims processing and patient accounting lie many other data exchange processes that should also be addressed in the future.

With more than 29,000 members engaged in the management of healthcare financial operations, HFMA stands ready to work with the subcommittee, Congress, the Federal government, and our partners in the healthcare industry. Together we must plan the steps necessary to improve our industry, lower the administrative burdens of health care, and control the unnecessary costs brought about by duplication of efforts, paper processing, and the lack of a national standard.

We thank the subcommittee and its chairman for this opportunity to submit testimony. If any member of the subcommittee, or any other reader of this testimony, would like additional information or has concerns we can address, please contact either Dan Rode, CMPA, director of policy and government relations (and a member of both the NUBC and the ANSI X12) at (708) 531-9600, ext. 361, or Wendy W. Herr, vice president, at (202) 296-2920.

Thank you again for this opportunity.

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April 16, 1992

The Honorable Pete Stark, Chairman  
Subcommittee on Health  
Committee on Ways and Means  
United States House of Representatives  
1102 Longworth House Office Building  
Washington, DC 20515

Dear Congressman Stark:

We read with great enthusiasm the March 17, 1992 press release announcing your committee's hearing on Options for Health Insurance: Administrative Simplification in Health Care. As a leader in the health care information systems and services industry with over 700 hospital and 6000 physician practice clients, IBAX is very interested in administrative simplification to help reduce costs in health care.

Consensus does seem to be building throughout the health care industry regarding administrative measures that can lead to reduced costs. Some of the measures, such as a national or regional consortium for processing claims, will go a long way to reduce costs. However, it will take time to implement. Of critical importance to the success of this effort is development of, AND adherence to, uniform standards to facilitate the process.

Within the public payer system of Medicare, there appear to be no national standards. We see as many ways to "slice the pie" as there are carriers and intermediaries to process Medicare claims. Many believe that we have a single, national program for Medicare, but in reality, we have many regional, state, and local methodologies that implement requirements of the Medicare program in many different ways.

For example, the Health Care Financing Administration (HCFA) is currently in the process of implementing a new billing form - The HCFA Form 1500 (12-90). HCFA has also issued instructions for completing the form. However, a Pennsylvania carrier has its own requirements IN ADDITION to those of HCFA. A carrier in Ohio has instructions that differ from those issued by HCFA, as well. These are but two examples of additional administrative burdens being placed on information systems vendors, such as ourselves, that lead to increased costs to the provider community.

State Medicaid is also a complicated issue. There appear to be as many ways to administer this program as there are states. While state sovereignty is important, much of the funding for state Medicaid programs comes from the federal government. Perhaps a condition of participation could be adherence to truly uniform billing guidelines.

The environment being imposed by the Blue Cross Associations varies across the various Blue Cross organizations. The commercial insurance environment is as varied as well. While the Uniform Bill was established in 1982, we have yet to see uniform billing in this country.

The Honorable Pete Stark  
April 16, 1992  
Page 2

The areas that IBAX sees as opportunities to reduce the administrative costs of providing health care following.

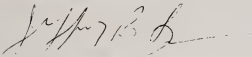
- 1) True Uniform Billing for all payers, both public and private;
- 2) Electronic Data Interchange to facilitate national, uniform electronic billing and use of "smart card" technology for insurance verification;
- 3) Regional processing of electronic claims;
- 4) Standard utilization review and other audit criteria, to be performed electronically wherever possible; and
- 5) Automation of the patient record to facilitate access to critically important patient health information.

Other information intense-industries have realized the benefits of working together to achieve commonality of purpose and reduced costs by establishing and adhering to standards. The health care industry is lagging in this regard. Little incentive exists, however, for health care to embrace this effort without some form of legislation or regulation.

We would support legislation that works toward accomplishing the above goals in a fair and equitable manner for all parties concerned - payers (both public and private), providers, suppliers and, of course, the patient.

Thank you for this opportunity to provide written testimony concerning a very important issue being faced by this country.

Sincerely yours,



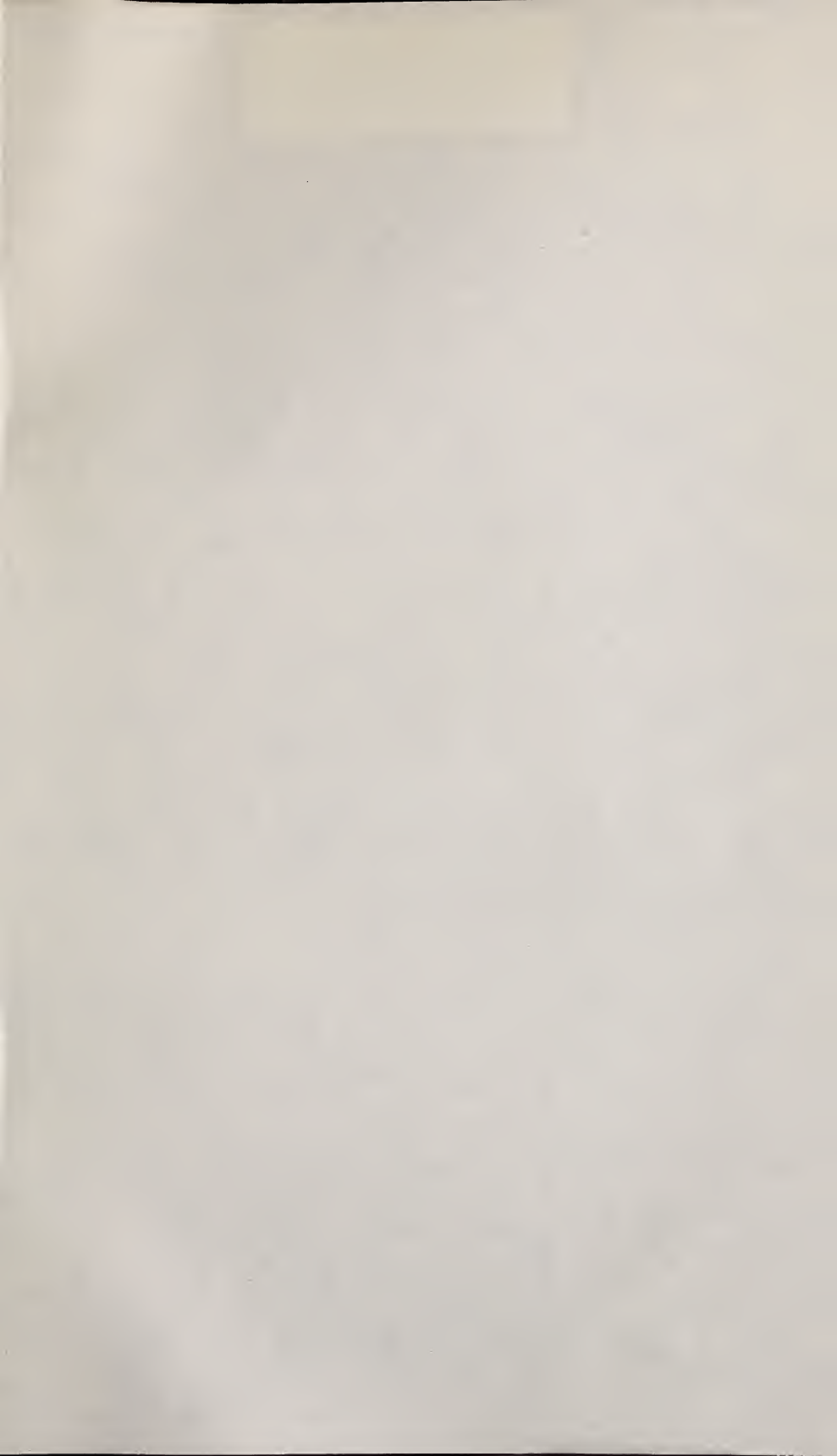
Jeffrey B. Spears  
Manager, Regulatory Affairs

Documentation regarding cost differentials can be made available should the committee wish to explore this issue further.









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